

AVX SMD Power Inductors



Version 13.2



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LMax SMD Non-Shield Power Inductor

| | |
|--|----------------------------------------------|
| | LMXN Series – Non-Shielded Style B2-3 |
| | LMXN Series – Non-Shielded Style C4-7 |
| | LMXN Series – Non-Shielded Style D8-11 |

LMax SMD Shielded Power Inductor

| | |
|--|----------------------------------------------|
| | LMXS Series – Shielded Style B12-15 |
| | LMXS Series – Shielded Style C16-20 |
| | LMXS Series – Shielded Style D21-23 |
| | LMXS Series – Shielded Style F24-27 |
| | LMXS Series – Shielded Style G28-29 |
| | LMXS Series – Shielded Style H30-32 |
| | LMXS Series – Shielded Style J33-34 |
| | LMXS Series – Shielded Style K35-36 |
| | LMXS Series – Shielded Style L37-38 |
| | LMXS Series – Shielded Style M39-40 |
| | LMXS Series – Shielded Style P41-44 |
| | LMXS Series – Shielded Style Q, S45-46 |

LMax SMD Miniature Power Inductor

| | |
|--|--------------------------------------------|
| | LMMN Series – Miniature Style M47-52 |
|--|--------------------------------------------|

LMax DIP Power Inductor

| | |
|--|----------------------------------------------|
| | LMDP Series –Non Shielded Style N53-55 |
| | LMDP Series –Shielded Style P56-57 |
| | LMDP Series –Shielded Style S58-60 |

LMax Low Profile Power Inductor

| | |
|--|---------------------------------|
| | LMLP Series –Style C61-66 |
| | LMLP Series –Style D67-73 |
| | LMLP Series –Style M74-75 |
| | LMLP Series –Style O76 |
| | LMLP Series –Style R77-81 |

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LMax SMD Power Inductor



LMXN Series – Non-Shielded Style B

FEATURES

- Miniature surface mount design
- High power, High saturation inductors
- Very low resistance
- Maximum power density
- Ideal inductors for DC–DC converters
- Available on tape and reel for auto surface mounting

APPLICATIONS

- Notebook Computers
- Handheld Communications
- LCD Televisions
- Power Supply For VTRs
- DC/DC Converters, etc.

CHARACTERISTICS

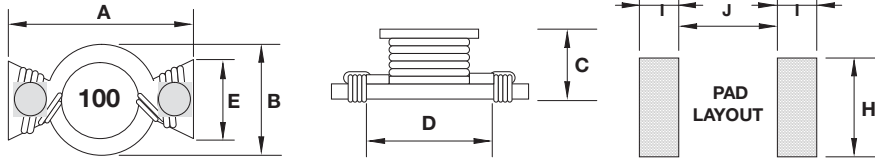
- Saturation Rated Current: The current when the inductance becomes 30% lower than its initial value. (Ta=25°C)
- Operating temperature range: -40 ~ 85°C

INDUCTANCE AND RATED CURRENT RANGES

- 0705 0.47μH ~ 22.0μH 7.7 ~ 0.70A
- 0906 0.56μH ~ 100μH 7.7 ~ 0.53A
- 1310 0.47μH ~ 100μH 11.4 ~ 0.95A
- 1913 0.47μH ~ 100μH 25.1 ~ 1.80A
- 2216 0.78μH ~ 680μH 30.0 ~ 0.5A
- Electrical specifications at 25°C



DIMENSIONS



mm (inches)

| Type | A max. | B max. | C max. | D | E | H | I | J |
|------|------------------|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|
| 0705 | 7.50 (0.295) | 5.20 (0.205) | 3.20 (0.126) | 4.60 (0.181) | 2.50 (0.098) | 4.00 (0.157) | 2.00 (0.079) | 4.00 (0.157) |
| 0906 | 8.89 (0.350) | 6.40 (0.252) | 5.00 (0.197) | 5.84 (0.230) | 2.60 (0.103) | 4.06 (0.160) | 2.00 (0.079) | 5.08 (0.200) |
| 1310 | 13.20 (0.560) | 9.90 (0.390) | 6.35 (0.250) | 9.50 (0.374) | 4.50 (0.177) | 6.50 (0.256) | 2.30 (0.091) | 9.00 (0.344) |
| 1913 | 19.40 (0.764) | 13.30 (0.524) | 6.80 (0.268) | 12.7 (0.500) | 6.60 (0.260) | 8.00 (0.315) | 3.80 (0.150) | 11.7 (0.460) |
| 2216 | 22.35 (0.880) | 16.26 (0.604) | 8.00 (0.315) | 16.0 (0.630) | 8.00 (0.315) | 8.64 (0.340) | 4.30 (0.169) | 14.35 (0.565) |

HOW TO ORDER

| | | | | | | | | |
|---------------------|-------------------|-----------------------------------|------------------------------|---------------------------------------------------------------------------------------------------|--------------|--------------------|----------------|------------------|
| LM | XN | 0705 | M | R04 | B | T | A | S |
| Family | Series | Size | Tolerance | Inductance | Style | Termination | Special | Packaging |
| LM = Power Inductor | XN = Non-Shielded | 0705 = 7x5xh (h = see catalog) | M = ±20% P = +40% -20% | R04 = 0.039μH R39 = 0.390μH 3R9 = 3.900μH 390 = 39.00μH 391 = 390.0μH 392 = 3900μH | T = Sn Plate | A = Standard | S = 13" Reel | |



LMax SMD Power Inductor



LMXN Series – Non-Shielded Style B

ELECTRICAL CHARACTERISTICS

0705/0906/1310/1913/2216

| Codes | L (μ H) | Tolerance | | | Test Condition | DCR (Ω) max. | | | | | I sat (A) max* | | | | |
|-------|-----------------|-----------|--------------|--------------|-------------------|-----------------------|-------|-------|-------|-------|----------------|------|------|------|------|
| | | 705 | 0906 2216 | 1310 1913 | | 0705 | 0906 | 1310 | 1913 | 2216 | 0705 | 0906 | 1310 | 1913 | 2216 |
| R47 | 0.47 | P | - | P | 100KHz, 0.1V | 0.025 | - | 0.005 | 0.003 | - | 7.7 | - | 11.4 | 25.1 | - |
| R56 | 0.56 | - | M | - | 100KHz, 0.1V | - | 0.010 | - | - | - | - | 7.7 | - | - | - |
| R78 | 0.78 | - | M | - | 100KHz, 0.1V | - | - | - | - | 0.003 | - | - | - | - | 30 |
| 1R0 | 1.0 | M | - | P | 100KHz, 0.1V | 0.050 | - | 0.006 | 0.004 | - | 2.9 | - | 9.9 | 15.3 | - |
| 1R5 | 1.5 | M | M | P | 100KHz, 0.1V | 0.050 | - | 0.008 | 0.006 | 0.004 | 2.6 | - | 7.9 | 12 | 25 |
| 2R2 | 2.2 | M | M | M | 100KHz, 0.1V | 0.070 | 0.035 | 0.011 | 0.008 | 0.006 | 2.3 | 3.5 | 6.1 | 10.2 | 20 |
| 3R3 | 3.3 | M | M | M | 100KHz, 0.1V | 0.080 | 0.040 | 0.014 | 0.009 | 0.009 | 2 | 3 | 5.1 | 9.3 | 17 |
| 3R9 | 3.9 | - | M | - | 100KHz, 0.1V | - | - | - | - | 0.010 | - | - | - | - | 15 |
| 4R7 | 4.7 | M | M | M | 100KHz, 0.1V | 0.090 | 0.054 | 0.018 | 0.012 | 0.014 | 1.5 | 2.6 | 4.2 | 7.7 | 13 |
| 6R0 | 6.0 | - | M | - | 100KHz, 0.1V | - | - | - | - | 0.017 | - | - | - | - | 12 |
| 6R8 | 6.8 | M | M | M | 100KHz, 0.1V | 0.130 | 0.08 | 0.027 | 0.019 | - | 1.2 | 2.2 | 3.6 | 6.2 | - |
| 7R8 | 7.8 | - | M | - | 100KHz, 0.1V | - | - | - | - | 0.018 | - | - | - | - | 11 |
| 100 | 10 | M | M | M | 100KHz, 0.1V | 0.160 | 0.111 | 0.038 | 0.027 | 0.026 | 1.1 | 1.9 | 3.3 | 5.2 | 10 |
| 150 | 15 | M | M | M | 100KHz, 0.1V | 0.230 | 0.170 | 0.045 | 0.032 | 0.032 | 0.9 | 1.5 | 2.4 | 4.3 | 8 |
| 220 | 22 | M | M | M | 100KHz, 0.1V | 0.370 | 0.250 | 0.070 | 0.050 | 0.043 | 0.7 | 1.2 | 2 | 3.7 | 7 |
| 330 | 33 | - | M | M | 100KHz, 0.1V | - | 0.350 | 0.100 | 0.069 | 0.066 | - | 0.99 | 1.7 | 3 | 6 |
| 470 | 47 | - | M | M | 100KHz, 0.1V | - | 0.470 | 0.150 | 0.109 | 0.096 | - | 0.87 | 1.4 | 2.4 | 5 |
| 680 | 68 | - | M | M | 100KHz, 0.1V | - | 0.730 | 0.220 | 0.156 | 0.115 | - | 0.68 | 1.2 | 2 | 4 |
| 101 | 100 | - | M | M | 100KHz, 0.1V | - | 1.110 | 0.280 | 0.206 | 0.165 | - | 0.53 | 0.95 | 1.8 | 3 |
| 221 | 220 | - | M | - | 100KHz, 0.1V | - | - | - | - | 0.396 | - | - | - | - | 2.4 |
| 331 | 330 | - | M | - | 100KHz, 0.1V | - | - | - | - | 0.588 | - | - | - | - | 1 |
| 471 | 470 | - | M | - | 100KHz, 0.1V | - | - | - | - | 0.950 | - | - | - | - | 0.8 |
| 681 | 680 | - | M | - | 100KHz, 0.1V | - | - | - | - | 1.200 | - | - | - | - | 0.5 |

*Saturation Current: The current when the inductance becomes 30% lower than its initial value. (Ta=25°C)

LMax SMD Power Inductor



LMXN Series – Non-Shielded Style C

FEATURES

- High power, High saturation inductors
- Ideal inductors for DC-DC converters in notebook computers, PDAs, Step-up or step-down converters, flash memory programmers, etc.
- 0705 has ceramic base with gold-plating
- Others have LCP plastic base

APPLICATIONS

- Portable Telephones
- Personal Computers
- DC/DC Converters
- Various Electronic Appliances

CHARACTERISTICS

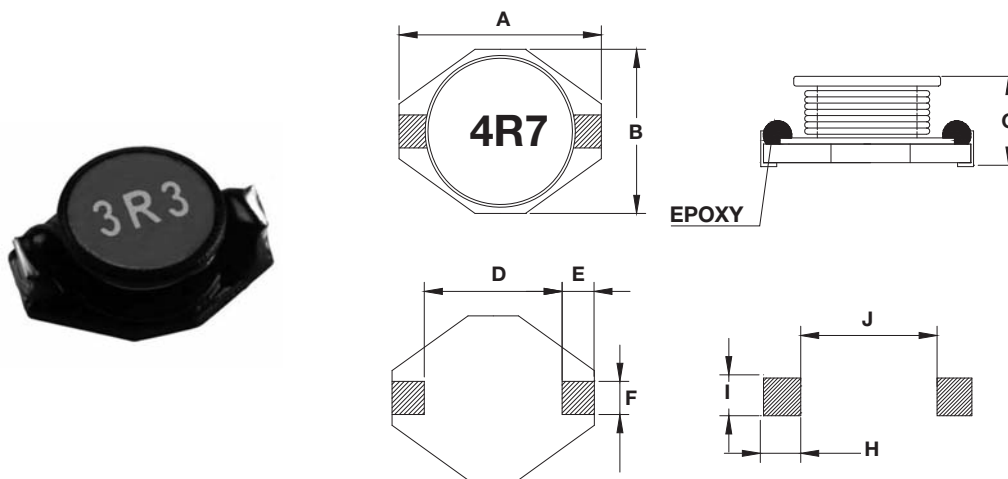
- Saturation Rated Current: The current when the inductance becomes 10% lower than its initial value. (Ta=25°C)
- Operating temperature range: -40 ~ 125°C

INDUCTANCE AND RATED CURRENT RANGES

- 0705 1.0μH ~ 1000μH 2.9 ~ 0.10A
- 1309 4.7μH ~ 1000μH 4.2 ~ 0.29A
- 13E9 1.0μH ~ 1000μH 9.0 ~ 0.30A
- 13L9 0.47μH ~ 1000μH 40 ~ 0.8A
- 1915 1.0μH ~ 1000μH 20 ~ 1.0A
- Electrical specifications at 25°C



DIMENSIONS



mm (inches)

| Type | A max. | B max. | C max. | D | E | F | H | I | J |
|------|------------------|------------------|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|
| 0705 | 6.60 (0.260) | 4.45 (0.175) | 2.92 (0.115) | 4.32 (0.170) | 1.27 (0.050) | 1.02 (0.040) | 3.56 (0.140) | 1.40 (0.055) | 4.06 (0.160) |
| 1309 | 12.95 (0.510) | 9.40 (0.370) | 3.00 (0.118) | 7.62 (0.300) | 2.54 (0.100) | 2.54 (0.100) | 2.79 (0.110) | 2.92 (0.115) | 7.37 (0.290) |
| 13E9 | 12.95 (0.510) | 9.40 (0.370) | 5.21 (0.205) | 7.62 (0.300) | 2.54 (0.100) | 2.54 (0.100) | 2.79 (0.110) | 2.92 (0.115) | 7.37 (0.290) |
| 13L9 | 12.95 (0.510) | 9.40 (0.370) | 11.43 (0.450) | 7.62 (0.300) | 2.54 (0.100) | 2.54 (0.100) | 2.79 (0.110) | 2.92 (0.115) | 7.37 (0.290) |
| 1915 | 18.54 (0.730) | 15.24 (0.600) | 7.11 (0.280) | 12.7 (0.500) | 2.54 (0.100) | 2.54 (0.100) | 2.79 (0.110) | 2.92 (0.115) | 12.45 (0.490) |

LMax SMD Power Inductor



LMXN Series – Non-Shielded Style C

HOW TO ORDER

| | | | | | | | | |
|---------------------------------|---------------------------------|--------------------------------------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------------|---------------------------------|-----------------------------------|
| LM Family | XN Series | 1309 Size | M Tolerance | R04 Inductance | C Style | T Termination | A Special | S Packaging |
| LM = Power Inductor | XN = Non-shielded | 1309 = 13x9xh 13E9 = 13x9xE(h) (h = see catalog) | M = ±20% N = ±30% | R04 = 0.039µH R39 = 0.390µH 3R9 = 3.900µH 390 = 39.00µH 391 = 390.0µH 392 = 3900µH | | T = Sn Plate | A = Standard | S = 13" Reel |

ELECTRICAL CHARACTERISTICS

0705

| Codes | L (µH) | Tolerance | Test Condition | DCR (Ω) max. | I sat (A) max* |
|-------|--------|-----------|----------------|--------------|----------------|
| 1R0 | 1.0 | M | 100KHz, 0.1V | 0.05 | 2.90 |
| 1R5 | 1.5 | M | 100KHz, 0.1V | 0.06 | 2.60 |
| 2R2 | 2.2 | M | 100KHz, 0.1V | 0.07 | 2.30 |
| 3R3 | 3.3 | M | 100KHz, 0.1V | 0.08 | 2.00 |
| 4R7 | 4.7 | M | 100KHz, 0.1V | 0.09 | 1.50 |
| 6R8 | 6.8 | M | 100KHz, 0.1V | 0.13 | 1.20 |
| 8R2 | 8.2 | M | 100KHz, 0.1V | 0.16 | 1.15 |
| 100 | 10 | M | 100KHz, 0.1V | 0.16 | 1.10 |
| 150 | 15 | M | 100KHz, 0.1V | 0.23 | 0.90 |
| 220 | 22 | M | 100KHz, 0.1V | 0.37 | 0.70 |
| 330 | 33 | M | 100KHz, 0.1V | 0.51 | 0.58 |
| 470 | 47 | M | 100KHz, 0.1V | 0.64 | 0.50 |
| 680 | 68 | M | 100KHz, 0.1V | 0.86 | 0.40 |
| 101 | 100 | M | 100KHz, 0.1V | 1.27 | 0.31 |
| 151 | 150 | M | 100KHz, 0.1V | 2.00 | 0.27 |
| 221 | 220 | M | 100KHz, 0.1V | 3.11 | 0.22 |
| 331 | 330 | M | 100KHz, 0.1V | 3.80 | 0.18 |
| 471 | 470 | M | 100KHz, 0.1V | 5.06 | 0.16 |
| 681 | 680 | M | 100KHz, 0.1V | 9.20 | 0.14 |
| 102 | 1000 | M | 100KHz, 0.1V | 13.8 | 0.10 |

1309

| Codes | L (µH) | Tolerance | Test Condition | DCR (Ω) max. | I sat (A) max* |
|-------|--------|-----------|----------------|--------------|----------------|
| 4R7 | 4.7 | M | 100KHz, 0.1V | 0.036 | 4.20 |
| 6R8 | 6.8 | M | 100KHz, 0.1V | 0.060 | 3.90 |
| 100 | 10 | M | 100KHz, 0.1V | 0.085 | 2.70 |
| 150 | 15 | M | 100KHz, 0.1V | 0.12 | 2.30 |
| 220 | 22 | M | 100KHz, 0.1V | 0.18 | 1.80 |
| 330 | 33 | M | 100KHz, 0.1V | 0.25 | 1.60 |
| 470 | 47 | M | 100KHz, 0.1V | 0.32 | 1.30 |
| 680 | 68 | M | 100KHz, 0.1V | 0.54 | 1.10 |
| 101 | 100 | M | 100KHz, 0.1V | 0.69 | 0.87 |
| 151 | 150 | M | 100KHz, 0.1V | 0.94 | 0.74 |
| 221 | 220 | M | 100KHz, 0.1V | 1.60 | 0.56 |
| 331 | 330 | M | 100KHz, 0.1V | 2.15 | 0.50 |
| 471 | 470 | M | 100KHz, 0.1V | 3.30 | 0.40 |
| 681 | 680 | M | 100KHz, 0.1V | 4.40 | 0.33 |
| 102 | 1000 | M | 100KHz, 0.1V | 7.00 | 0.29 |

*Saturation Current: The current when the inductance becomes 10% lower than its initial value. (Ta=25°C)

LMax SMD Power Inductor



LMXN Series – Non-Shielded Style C

13E9

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | I sat (A) max* |
|-------|--------|-----------|----------------|--------------|----------------|
| 1R0 | 1.0 | M | 100KHz, 0.1V | 0.009 | 9.00 |
| 1R5 | 1.5 | M | 100KHz, 0.1V | 0.010 | 8.00 |
| 2R2 | 2.2 | M | 100KHz, 0.1V | 0.012 | 7.00 |
| 3R3 | 3.3 | M | 100KHz, 0.1V | 0.015 | 6.40 |
| 4R7 | 4.7 | M | 100KHz, 0.1V | 0.018 | 5.40 |
| 6R8 | 6.8 | M | 100KHz, 0.1V | 0.027 | 4.60 |
| 100 | 10 | M | 100KHz, 0.1V | 0.038 | 3.80 |
| 150 | 15 | M | 100KHz, 0.1V | 0.046 | 3.00 |
| 220 | 22 | M | 100KHz, 0.1V | 0.085 | 2.60 |
| 330 | 33 | M | 100KHz, 0.1V | 0.100 | 2.00 |
| 470 | 47 | M | 100KHz, 0.1V | 0.140 | 1.60 |
| 680 | 68 | M | 100KHz, 0.1V | 0.200 | 1.40 |
| 101 | 100 | M | 100KHz, 0.1V | 0.280 | 1.20 |
| 151 | 150 | M | 100KHz, 0.1V | 0.400 | 1.00 |
| 221 | 220 | M | 100KHz, 0.1V | 0.610 | 0.80 |
| 331 | 330 | M | 100KHz, 0.1V | 1.020 | 0.60 |
| 471 | 470 | M | 100KHz, 0.1V | 1.270 | 0.50 |
| 681 | 680 | M | 100KHz, 0.1V | 2.020 | 0.40 |
| 102 | 1000 | M | 100KHz, 0.1V | 3.000 | 0.30 |

13L9

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | I sat (A) max* |
|-------|--------|-----------|----------------|--------------|----------------|
| R47 | 0.47 | N | 100KHz, 0.1V | 0.008 | 40.0 |
| R82 | 0.82 | N | 100KHz, 0.1V | 0.009 | 34.7 |
| 1R2 | 1.2 | N | 100KHz, 0.1V | 0.010 | 28.4 |
| 1R5 | 1.5 | N | 100KHz, 0.1V | 0.010 | 25.7 |
| 2R2 | 2.2 | N | 100KHz, 0.1V | 0.012 | 23.0 |
| 3R5 | 3.5 | N | 100KHz, 0.1V | 0.015 | 21.0 |
| 4R7 | 4.7 | N | 100KHz, 0.1V | 0.020 | 18.0 |
| 5R6 | 5.6 | N | 100KHz, 0.1V | 0.022 | 16.0 |
| 6R8 | 6.8 | N | 100KHz, 0.1V | 0.030 | 15.0 |
| 8R2 | 8.2 | N | 100KHz, 0.1V | 0.033 | 10.0 |
| 100 | 10 | M | 100KHz, 0.1V | 0.040 | 8.00 |
| 150 | 15 | M | 100KHz, 0.1V | 0.050 | 7.00 |
| 220 | 22 | M | 100KHz, 0.1V | 0.066 | 5.50 |
| 330 | 33 | M | 100KHz, 0.1V | 0.080 | 4.00 |
| 470 | 47 | M | 100KHz, 0.1V | 0.11 | 3.80 |
| 680 | 68 | M | 100KHz, 0.1V | 0.17 | 3.00 |
| 101 | 100 | M | 100KHz, 0.1V | 0.22 | 2.50 |
| 151 | 150 | M | 100KHz, 0.1V | 0.34 | 2.00 |
| 221 | 220 | M | 100KHz, 0.1V | 0.44 | 1.60 |
| 331 | 330 | M | 100KHz, 0.1V | 0.70 | 1.20 |
| 471 | 470 | M | 100KHz, 0.1V | 0.95 | 1.00 |
| 681 | 680 | M | 100KHz, 0.1V | 1.20 | 1.00 |
| 102 | 1000 | M | 100KHz, 0.1V | 2.00 | 0.80 |

*Saturation Current: The current when the inductance becomes 10% lower than its initial value. (Ta=25°C)

LMax SMD Power Inductor



Non-Shielded Style C

1915

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | I sat (A) max* |
|-------|--------|-----------|----------------|--------------|----------------|
| 1R0 | 1.0 | M | 100KHz, 0.1V | 0.009 | 20 |
| 2R2 | 2.2 | M | 100KHz, 0.1V | 0.014 | 16 |
| 3R3 | 3.3 | M | 100KHz, 0.1V | 0.018 | 14 |
| 5R6 | 5.6 | M | 100KHz, 0.1V | 0.020 | 12 |
| 100 | 10 | M | 100KHz, 0.1V | 0.031 | 10 |
| 150 | 15 | M | 100KHz, 0.1V | 0.036 | 8.0 |
| 220 | 22 | M | 100KHz, 0.1V | 0.047 | 7.0 |
| 330 | 33 | M | 100KHz, 0.1V | 0.066 | 5.5 |
| 470 | 47 | M | 100KHz, 0.1V | 0.095 | 4.5 |
| 680 | 68 | M | 100KHz, 0.1V | 0.130 | 3.5 |
| 101 | 100 | M | 100KHz, 0.1V | 0.190 | 3.0 |
| 151 | 150 | M | 100KHz, 0.1V | 0.250 | 2.6 |
| 221 | 220 | M | 100KHz, 0.1V | 0.380 | 2.4 |
| 331 | 330 | M | 100KHz, 0.1V | 0.560 | 1.9 |
| 471 | 470 | M | 100KHz, 0.1V | 0.850 | 1.4 |
| 681 | 680 | M | 100KHz, 0.1V | 1.100 | 1.2 |
| 102 | 1000 | M | 100KHz, 0.1V | 1.800 | 1.0 |

*Saturation Current: The current when the inductance becomes 10% lower than its initial value. (Ta=25°C)

LMax SMD Power Inductor



LMXN Series – Non-Shielded Style D

FEATURES

- Open Magnetic Circuit Construction
- Small Surface Area

APPLICATIONS

- LCD Televisions
- Notebooks
- Portable Communication
- DC/DC Converters, etc.

CHARACTERISTICS

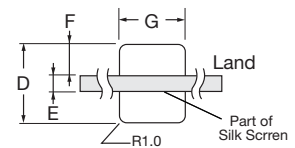
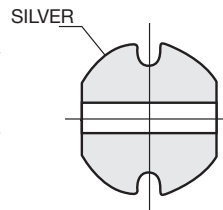
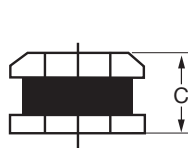
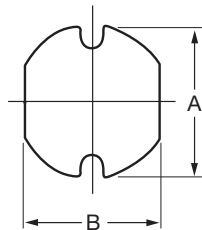
- Rated Current (IDC): The DC current that will cause an approximate ΔT of 40°C. ($T_a=25^\circ\text{C}$)
- Operating temperature range: $-40^\circ\text{C} \sim +125^\circ\text{C}$

INDUCTANCE AND RATED CURRENT RANGES

- 0504 1.0 $\mu\text{H} \sim 33 \mu\text{H}$ 3.30 ~ 0.56A
- 0605 10.0 $\mu\text{H} \sim 220 \mu\text{H}$ 1.44 ~ 0.35A
- 0808 10.0 $\mu\text{H} \sim 330 \mu\text{H}$ 1.44 ~ 0.28A
- 08G8 10.0 $\mu\text{H} \sim 470 \mu\text{H}$ 2.30 ~ 0.34A
- 1009 10.0 $\mu\text{H} \sim 560 \mu\text{H}$ 2.38 ~ 0.32A
- 10F9 10.0 $\mu\text{H} \sim 820 \mu\text{H}$ 2.6 ~ 0.24A
- Electrical specifications at 25°C



DIMENSIONS



mm (inches)

| Type | A | B | C | D | E | F | G |
|------|-------------------------------|--------------------------------|--------------------------------|-----------------|-----------------|-----------------|-----------------|
| 0504 | 4.50 ± 0.30 (0.177 ± .012) | 4.00 ± 0.30 (0.158 ± 0.012) | 3.20 ± 0.30 (0.126 ± 0.012) | 5.00 (0.197) | 1.50 (0.059) | 1.75 (0.069) | 4.50 (0.177) |
| 0605 | 5.80 ± 0.30 (0.228 ± .012) | 5.20 ± 0.30 (0.205 ± 0.012) | 4.50 ± 0.35 (0.177 ± 0.014) | 6.00 (0.236) | 1.70 (0.067) | 2.15 (0.085) | 5.50 (0.217) |
| 0808 | 7.80 ± 0.30 (0.307 ± .012) | 7.30 ± 0.30 (0.276 ± 0.012) | 3.50 ± 0.50 (0.140 ± 0.020) | 8.00 (0.315) | 2.00 (0.079) | 3.00 (0.118) | 7.50 (0.295) |
| 08G8 | 7.80 ± 0.30 (0.307 ± .012) | 7.30 ± 0.30 (0.287 ± 0.012) | 5.08 ± 0.50 (0.200 ± 0.020) | 8.00 (0.315) | 2.00 (0.079) | 3.00 (0.118) | 7.50 (0.295) |
| 1009 | 10.0 ± 0.30 (0.394 ± .012) | 9.00 ± 0.30 (0.354 ± 0.012) | 4.00 ± 0.50 (0.158 ± 0.020) | 10.0 (0.394) | 2.50 (0.098) | 3.75 (0.148) | 9.50 (0.374) |
| 10F9 | 10.0 ± 0.40 (0.394 ± .016) | 9.00 ± 0.40 (0.354 ± 0.016) | 5.40 ± 0.40 (0.213 ± 0.016) | 10.0 (0.394) | 2.50 (0.098) | 3.75 (0.148) | 9.50 (0.374) |

HOW TO ORDER

LM

Family

LM = Power Inductor

XN

Series

XN = Non-shielded

1009

Size

1009 = 10x9xh
10F9 = 10x9xF(h)
(h = see catalog)

M

Tolerance

M = ±20%

R04

Inductance

1R0 = 1.00 μH
390 = 39.00 μH
391 = 390.0 μH

D

Style

T

Termination

T = Sn Plate

A

Special

A = Standard

S

Packaging

S = 13" Reel

LMax SMD Power Inductor



LMXN Series – Non-Shielded Style D

ELECTRICAL CHARACTERISTICS

0504

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 1R0 | 1.0 | M | 100KHz, 1.0V | 0.048 | 3.30 |
| 1R4 | 1.4 | M | 100KHz, 1.0V | 0.056 | 2.80 |
| 1R8 | 1.8 | M | 100KHz, 1.0V | 0.063 | 2.45 |
| 2R2 | 2.2 | M | 100KHz, 1.0V | 0.071 | 2.21 |
| 2R7 | 2.7 | M | 100KHz, 1.0V | 0.078 | 2.00 |
| 3R3 | 3.3 | M | 100KHz, 1.0V | 0.086 | 1.81 |
| 3R9 | 3.9 | M | 100KHz, 1.0V | 0.093 | 1.66 |
| 4R7 | 4.7 | M | 100KHz, 1.0V | 0.108 | 1.51 |
| 5R6 | 5.6 | M | 100KHz, 1.0V | 0.125 | 1.40 |
| 6R8 | 6.8 | M | 100KHz, 1.0V | 0.131 | 1.26 |
| 8R2 | 8.2 | M | 100KHz, 1.0V | 0.146 | 1.14 |
| 100 | 10 | M | 100KHz, 1.0V | 0.182 | 1.04 |
| 120 | 12 | M | 100KHz, 1.0V | 0.210 | 0.97 |
| 150 | 15 | M | 100KHz, 1.0V | 0.235 | 0.85 |
| 180 | 18 | M | 100KHz, 1.0V | 0.338 | 0.74 |
| 220 | 22 | M | 100KHz, 1.0V | 0.378 | 0.68 |
| 270 | 27 | M | 100KHz, 1.0V | 0.522 | 0.62 |
| 330 | 33 | M | 100KHz, 1.0V | 0.540 | 0.56 |

0605

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 100 | 10 | M | 100KHz, 1.0V | 0.100 | 1.44 |
| 120 | 12 | M | 100KHz, 1.0V | 0.120 | 1.40 |
| 150 | 15 | M | 100KHz, 1.0V | 0.140 | 1.30 |
| 180 | 18 | M | 100KHz, 1.0V | 0.150 | 1.23 |
| 220 | 22 | M | 100KHz, 1.0V | 0.180 | 1.11 |
| 270 | 27 | M | 100KHz, 1.0V | 0.200 | 0.97 |
| 330 | 33 | M | 100KHz, 1.0V | 0.230 | 0.88 |
| 390 | 39 | M | 100KHz, 1.0V | 0.320 | 0.80 |
| 470 | 47 | M | 100KHz, 1.0V | 0.370 | 0.72 |
| 560 | 56 | M | 100KHz, 1.0V | 0.420 | 0.68 |
| 680 | 68 | M | 100KHz, 1.0V | 0.460 | 0.61 |
| 820 | 82 | M | 100KHz, 1.0V | 0.600 | 0.58 |
| 101 | 100 | M | 100KHz, 1.0V | 0.700 | 0.52 |
| 121 | 120 | M | 100KHz, 1.0V | 0.930 | 0.48 |
| 151 | 150 | M | 100KHz, 1.0V | 1.100 | 0.40 |
| 181 | 180 | M | 100KHz, 1.0V | 1.380 | 0.38 |
| 221 | 220 | M | 100KHz, 1.0V | 1.570 | 0.35 |

LMax SMD Power Inductor



LMXN Series – Non-Shielded Style D

0808

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 100 | 10 | M | 100KHz, 1.0V | 1.44 | 0.081 |
| 120 | 12 | M | 100KHz, 1.0V | 1.39 | 0.089 |
| 150 | 15 | M | 100KHz, 1.0V | 1.24 | 0.104 |
| 180 | 18 | M | 100KHz, 1.0V | 1.12 | 0.111 |
| 220 | 22 | M | 100KHz, 1.0V | 1.07 | 0.129 |
| 270 | 27 | M | 100KHz, 1.0V | 0.94 | 0.153 |
| 330 | 33 | M | 100KHz, 1.0V | 0.85 | 0.170 |
| 390 | 39 | M | 100KHz, 1.0V | 0.74 | 0.217 |
| 470 | 47 | M | 100KHz, 1.0V | 0.68 | 0.252 |
| 560 | 56 | M | 100KHz, 1.0V | 0.64 | 0.282 |
| 680 | 68 | M | 100KHz, 1.0V | 0.59 | 0.332 |
| 820 | 82 | M | 100KHz, 1.0V | 0.54 | 0.406 |
| 101 | 100 | M | 100KHz, 1.0V | 0.51 | 0.481 |
| 121 | 120 | M | 100KHz, 1.0V | 0.49 | 0.536 |
| 151 | 150 | M | 100KHz, 1.0V | 0.40 | 0.755 |
| 181 | 180 | M | 100KHz, 1.0V | 0.36 | 1.022 |
| 221 | 220 | M | 100KHz, 1.0V | 0.31 | 1.200 |
| 271 | 270 | M | 100KHz, 1.0V | 0.29 | 1.306 |
| 331 | 330 | M | 100KHz, 1.0V | 0.28 | 1.495 |

08G8

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 100 | 10 | M | 100KHz, 1.0V | 0.070 | 2.30 |
| 120 | 12 | M | 100KHz, 1.0V | 0.080 | 2.00 |
| 150 | 15 | M | 100KHz, 1.0V | 0.090 | 1.80 |
| 180 | 18 | M | 100KHz, 1.0V | 0.100 | 1.60 |
| 220 | 22 | M | 100KHz, 1.0V | 0.110 | 1.50 |
| 270 | 27 | M | 100KHz, 1.0V | 0.120 | 1.30 |
| 330 | 33 | M | 100KHz, 1.0V | 0.130 | 1.20 |
| 470 | 47 | M | 100KHz, 1.0V | 0.180 | 1.00 |
| 560 | 56 | M | 100KHz, 1.0V | 0.240 | 0.94 |
| 680 | 68 | M | 100KHz, 1.0V | 0.280 | 0.85 |
| 820 | 82 | M | 100KHz, 1.0V | 0.370 | 0.78 |
| 101 | 100 | M | 100KHz, 1.0V | 0.430 | 0.72 |
| 121 | 120 | M | 100KHz, 1.0V | 0.470 | 0.66 |
| 151 | 150 | M | 100KHz, 1.0V | 0.640 | 0.58 |
| 221 | 220 | M | 100KHz, 1.0V | 0.960 | 0.49 |
| 331 | 330 | M | 100KHz, 1.0V | 1.260 | 0.40 |
| 391 | 390 | M | 100KHz, 1.0V | 1.770 | 0.36 |
| 471 | 470 | M | 100KHz, 1.0V | 1.960 | 0.34 |

LMax SMD Power Inductor



LMXN Series – Non-Shielded Style D

1009

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 100 | 10 | M | 100KHz, 1.0V | 0.053 | 2.38 |
| 120 | 12 | M | 100KHz, 1.0V | 0.061 | 2.13 |
| 150 | 15 | M | 100KHz, 1.0V | 0.070 | 1.87 |
| 180 | 18 | M | 100KHz, 1.0V | 0.081 | 1.73 |
| 220 | 22 | M | 100KHz, 1.0V | 0.088 | 1.60 |
| 330 | 33 | M | 100KHz, 1.0V | 0.120 | 1.26 |
| 470 | 47 | M | 100KHz, 1.0V | 0.170 | 1.10 |
| 560 | 56 | M | 100KHz, 1.0V | 0.199 | 1.01 |
| 680 | 68 | M | 100KHz, 1.0V | 0.223 | 0.91 |
| 820 | 82 | M | 100KHz, 1.0V | 0.252 | 0.85 |
| 101 | 100 | M | 100KHz, 1.0V | 0.344 | 0.74 |
| 121 | 120 | M | 100KHz, 1.0V | 0.396 | 0.69 |
| 181 | 180 | M | 100KHz, 1.0V | 0.621 | 0.56 |
| 221 | 220 | M | 100KHz, 1.0V | 0.721 | 0.53 |
| 331 | 330 | M | 100KHz, 1.0V | 1.100 | 0.42 |
| 471 | 470 | M | 100KHz, 1.0V | 1.526 | 0.35 |
| 561 | 560 | M | 100KHz, 1.0V | 1.904 | 0.32 |

10F9

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 100 | 10 | M | 100KHz, 1.0V | 0.060 | 2.60 |
| 120 | 12 | M | 100KHz, 1.0V | 0.070 | 2.45 |
| 150 | 15 | M | 100KHz, 1.0V | 0.080 | 2.27 |
| 220 | 22 | M | 100KHz, 1.0V | 0.100 | 1.95 |
| 330 | 33 | M | 100KHz, 1.0V | 0.120 | 1.50 |
| 390 | 39 | M | 100KHz, 1.0V | 0.140 | 1.37 |
| 470 | 47 | M | 100KHz, 1.0V | 0.170 | 1.28 |
| 560 | 56 | M | 100KHz, 1.0V | 0.190 | 1.17 |
| 680 | 68 | M | 100KHz, 1.0V | 0.220 | 1.11 |
| 820 | 82 | M | 100KHz, 1.0V | 0.250 | 1.00 |
| 101 | 100 | M | 100KHz, 1.0V | 0.350 | 0.97 |
| 121 | 120 | M | 100KHz, 1.0V | 0.400 | 0.89 |
| 151 | 150 | M | 100KHz, 1.0V | 0.470 | 0.78 |
| 221 | 220 | M | 100KHz, 1.0V | 0.730 | 0.66 |
| 271 | 270 | M | 100KHz, 1.0V | 0.970 | 0.57 |
| 331 | 330 | M | 100KHz, 1.0V | 1.150 | 0.52 |
| 471 | 470 | M | 100KHz, 1.0V | 1.480 | 0.42 |
| 561 | 560 | M | 100KHz, 1.0V | 1.900 | 0.33 |
| 821 | 820 | M | 100KHz, 1.0V | 2.550 | 0.24 |

LMax SMD Power Inductor



LMXS Series – Shielded Style B

FEATURES

- Directly connected electrode on ferrite core
- Excellent property with high saturation for surface mounting

APPLICATIONS

- OA Equipment
- Notebook PCs
- LCD Monitor
- Portable Terminal Equipment
- DC/DC Converters, etc.
- Power Supply for VTR

CHARACTERISTICS

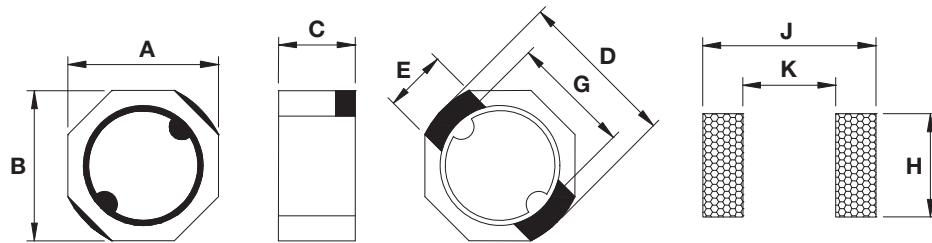
- Rated DC Current: The current when the inductance becomes 30% lower than its initial value.
- Operating temperature: -40 ~ 85°C

INDUCTANCE AND RATED CURRENT RANGES

- 04B4 0.47 ~ 2200μH 1.84 ~ 0.035A
- 04C4 1.0 ~ 6800μH 1.90 ~ 0.017A
- 04A4 1.0 ~ 100μH 1.50 ~ 0.100A
- 0505 0.47 ~ 820μH 2.33 ~ 0.030A
- 05C5 0.47 ~ 2500μH 4.82 ~ 0.045A
- 0606 1.0 ~ 3300μH 4.70 ~ 0.026A
- Electrical specifications at 25°C



DIMENSIONS



mm (inches)

| Type | A | B | C max. | D | E | G | H | K | J |
|------|--------------------------------|--------------------------------|-----------------|-------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 04B4 | 3.85 ± 0.30 (0.152 ± 0.012) | 3.85 ± 0.30 (0.152 ± 0.012) | 2.00 (0.079) | 3.9 ± 0.20 (0.154 ± 0.008) | 1.60 (0.063) | 3.20 (0.126) | 1.90 (0.075) | 3.00 (0.118) | 4.55 (0.179) |
| 04C4 | 3.85 ± 0.30 (0.152 ± 0.012) | 3.85 ± 0.30 (0.152 ± 0.012) | 3.00 (0.118) | 3.9 ± 0.20 (0.154 ± 0.008) | 1.60 (0.063) | 3.20 (0.126) | 1.90 (0.075) | 3.00 (0.118) | 4.55 (0.179) |
| 04A4 | 3.85 ± 0.30 (0.152 ± 0.012) | 3.85 ± 0.30 (0.152 ± 0.012) | 1.50 (0.059) | 4.80 max. (0.189 max.) | 1.60 (0.063) | 3.00 (0.118) | 2.00 (0.079) | 2.60 (0.102) | 5.20 (0.205) |
| 0505 | 5.30 max. (0.207 max.) | 5.30 max. (0.207 max.) | 2.00 (0.079) | 5.7 ± 0.40 (0.224 ± 0.016) | 1.60 (0.063) | 4.20 (0.165) | 1.90 (0.075) | 3.90 (0.154) | 5.70 (0.224) |
| 05C5 | 5.30 max. (0.207 max.) | 5.30 max. (0.207 max.) | 3.00 (0.118) | 5.7 ± 0.40 (0.224 ± 0.016) | 1.60 (0.063) | 4.20 (0.165) | 1.90 (0.075) | 3.90 (0.154) | 5.70 (0.224) |
| 0606 | 5.90 ± 0.20 (0.232 ± 0.008) | 5.90 ± 0.20 (0.232 ± 0.008) | 3.00 (0.118) | 6.4 ± 0.30 (0.252 ± 0.012) | 2.40 (0.094) | 4.70 (0.185) | 2.70 (0.106) | 4.40 (0.173) | 6.50 (0.256) |

HOW TO ORDER

| | | | | | | | | |
|---------------------|---------------|------------------------------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------|--------------|--------------------|----------------|------------------|
| LM | XS | 0505 | M | R04 | B | T | A | S |
| Family | Series | Size | Tolerance | Inductance | Style | Termination | Special | Packaging |
| LM = Power Inductor | XS = Shielded | 0505 = 5x5xh 05A5 = 5x5xA(h) (h = see catalog) | M = ±20% N = ±30% P = ±40% | R04 = 0.039μH R39 = 0.390μH 3R9 = 3.900μH 390 = 39.00μH 391 = 390.0μH 392 = 3900μH | T = Sn Plate | A = Standard | S = 13" Reel | |



LMax SMD Power Inductor



LMXS Series – Shielded Style B

ELECTRICAL CHARACTERISTICS

0404/04B4/04C4

| Codes | L (μ H) | Tolerance | Test | DCR (Ω) max. | | I sat (A) max* | |
|-------|-----------------|-----------|----------------|-----------------------|-------|----------------|-------|
| | | | Condition | 04B4 | 04C4 | 04B4 | 04C4 |
| R47 | 0.47 | N | 100 KHz, 0.25V | 0.017 | – | 1.84 | – |
| 1R0 | 1.0 | N | 100 KHz, 0.25V | 0.030 | 0.009 | 1.80 | 1.90 |
| 1R2 | 1.2 | N | 100 KHz, 0.25V | 0.043 | 0.010 | 1.70 | 1.75 |
| 1R5 | 1.5 | N | 100 KHz, 0.25V | 0.052 | 0.013 | 1.60 | 1.45 |
| 1R8 | 1.8 | N | 100 KHz, 0.25V | 0.056 | – | 1.55 | – |
| 2R0 | 2.0 | N | 100 KHz, 0.25V | 0.057 | 0.016 | 1.51 | 1.25 |
| 2R2 | 2.2 | N | 100 KHz, 0.25V | 0.058 | 0.025 | 1.50 | 1.15 |
| 2R4 | 2.4 | N | 100 KHz, 0.25V | 0.059 | – | 1.41 | – |
| 2R5 | 2.5 | N | 100 KHz, 0.25V | 0.059 | 0.018 | 1.40 | 1.05 |
| 2R7 | 2.7 | N | 100 KHz, 0.25V | 0.060 | 0.020 | 1.35 | 1.00 |
| 3R3 | 3.3 | N | 100 KHz, 0.25V | 0.064 | 0.030 | 1.30 | 0.96 |
| 3R5 | 3.5 | N | 100 KHz, 0.25V | 0.127 | 0.025 | 1.30 | 0.95 |
| 3R9 | 3.9 | N | 100 KHz, 0.25V | – | 0.033 | – | 0.87 |
| 4R7 | 4.7 | N | 100 KHz, 0.25V | 0.146 | 0.039 | 1.10 | 0.78 |
| 5R6 | 5.6 | N | 100 KHz, 0.25V | 0.176 | 0.044 | 0.95 | 0.74 |
| 6R2 | 6.2 | N | 100 KHz, 0.25V | 0.220 | – | 0.91 | – |
| 6R8 | 6.8 | N | 100 KHz, 0.25V | 0.238 | 0.051 | 0.90 | 0.68 |
| 8R2 | 8.2 | N | 100 KHz, 0.25V | 0.272 | 0.065 | 0.80 | 0.57 |
| 100 | 10 | M | 1KHz, 0.25V | 0.299 | 0.092 | 0.70 | 0.43 |
| 120 | 12 | M | 1KHz, 0.25V | – | 0.100 | – | 0.38 |
| 150 | 15 | M | 1KHz, 0.25V | 0.472 | 0.113 | 0.61 | 0.33 |
| 180 | 18 | M | 1KHz, 0.25V | 0.552 | 0.125 | 0.58 | 0.30 |
| 220 | 22 | M | 1KHz, 0.25V | 0.592 | 0.146 | 0.52 | 0.28 |
| 270 | 27 | M | 1KHz, 0.25V | 0.630 | 0.176 | 0.44 | 0.26 |
| 330 | 33 | M | 1KHz, 0.25V | 1.075 | 0.214 | 0.43 | 0.23 |
| 390 | 39 | M | 1KHz, 0.25V | 1.269 | 0.225 | 0.37 | 0.21 |
| 470 | 47 | M | 1KHz, 0.25V | 1.309 | 0.304 | 0.34 | 0.19 |
| 500 | 50 | M | 1KHz, 0.25V | – | – | – | – |
| 560 | 56 | M | 1KHz, 0.25V | 1.960 | 0.324 | 0.29 | 0.170 |
| 680 | 68 | M | 1KHz, 0.25V | 2.613 | 0.472 | 0.25 | 0.156 |
| 820 | 82 | M | 1KHz, 0.25V | 2.950 | 0.539 | 0.20 | 0.142 |
| 101 | 100 | M | 1KHz, 0.25V | 3.255 | 0.608 | 0.19 | 0.128 |
| 121 | 120 | M | 1KHz, 0.25V | 3.350 | 0.757 | 0.15 | 0.116 |
| 151 | 150 | M | 1KHz, 0.25V | 3.550 | 0.882 | 0.12 | 0.106 |
| 181 | 180 | M | 1KHz, 0.25V | 4.000 | 1.130 | 0.10 | 0.095 |
| 221 | 220 | M | 1KHz, 0.25V | 4.900 | 1.269 | 0.09 | 0.087 |
| 271 | 270 | M | 1KHz, 0.25V | – | 1.570 | – | 0.080 |
| 331 | 330 | M | 1KHz, 0.25V | 7.280 | 1.930 | 0.08 | 0.078 |
| 391 | 390 | M | 1KHz, 0.25V | – | 2.360 | – | 0.073 |
| 471 | 470 | M | 1KHz, 0.25V | – | 2.770 | – | 0.068 |
| 561 | 560 | M | 1KHz, 0.25V | – | 3.520 | – | 0.065 |
| 681 | 680 | M | 1KHz, 0.25V | 13.37 | 4.250 | 0.07 | 0.056 |
| 821 | 820 | M | 1KHz, 0.25V | – | 4.830 | – | 0.050 |
| 102 | 1000 | M | 1KHz, 0.25V | 19.55 | 6.260 | 0.065 | 0.047 |
| 122 | 1200 | M | 1KHz, 0.25V | – | 7.860 | – | 0.043 |
| 152 | 1522 | M | 1KHz, 0.25V | 36.15 | 9.980 | 0.038 | 0.039 |

*Saturation Current: The current when the inductance becomes 30% lower than its initial value.

LMax SMD Power Inductor



LMXS Series – Shielded Style B

04A4

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | I sat (A) max* |
|-------|--------|-----------|----------------|--------------|----------------|
| 1R0 | 1.0 | N | 100KHz, 0.1V | 0.058 | 1.50 |
| 1R2 | 1.2 | N | 100KHz, 0.1V | 0.070 | 1.40 |
| 2R2 | 2.2 | N | 100KHz, 0.1V | 0.082 | 1.00 |
| 3R3 | 3.3 | N | 100KHz, 0.1V | 0.105 | 0.92 |
| 3R9 | 3.9 | N | 100KHz, 0.1V | 0.120 | 0.80 |
| 4R7 | 4.7 | N | 100KHz, 0.1V | 0.150 | 0.76 |
| 5R6 | 5.6 | N | 100KHz, 0.1V | 0.180 | 0.69 |
| 6R8 | 6.8 | N | 100KHz, 0.1V | 0.220 | 0.62 |
| 8R2 | 8.2 | N | 100KHz, 0.1V | 0.240 | 0.56 |
| 100 | 10 | N | 100KHz, 0.1V | 0.255 | 0.50 |
| 150 | 15 | N | 100KHz, 0.1V | 0.390 | 0.40 |
| 220 | 22 | M | 100KHz, 0.1V | 0.610 | 0.32 |
| 330 | 33 | M | 100KHz, 0.1V | 0.920 | 0.28 |
| 470 | 47 | M | 100KHz, 0.1V | 1.130 | 0.20 |
| 680 | 68 | M | 100KHz, 0.1V | 1.520 | 0.15 |
| 101 | 100 | M | 100KHz, 0.1V | 2.120 | 0.10 |

*Saturation Current: The current when the inductance becomes 30% lower than its initial value.

LMax SMD Power Inductor



LMXS Series – Shielded Style B

0505/05C5/0606

| Codes | L (μ H) | Tolerance | Test Condition | DCR (Ω) max. | | | I sat (A) max* | | |
|-------|-----------------|-----------|-------------------|-----------------------|-------|-------|----------------|-------|-------|
| | | | | 0505 | 05C5 | 0606 | 0505 | 05C5 | 0606 |
| R47 | 0.47 | N | 100KHz, 0.25V | 0.015 | 0.010 | – | 2.33 | 4.82 | – |
| 1R0 | 1.0 | N | 100KHz, 0.25V | 0.024 | 0.015 | 0.014 | 2.27 | 4.00 | 4.70 |
| 1R1 | 1.1 | N | 100KHz, 0.25V | – | 0.020 | – | – | 3.87 | – |
| 1R2 | 1.2 | N | 100KHz, 0.25V | 0.044 | 0.022 | 0.016 | 2.15 | 3.80 | 3.90 |
| 1R5 | 1.5 | N | 100KHz, 0.25V | – | – | 0.018 | – | – | 3.52 |
| 1R8 | 1.8 | N | 100KHz, 0.25V | – | – | 0.019 | – | – | 3.25 |
| 2R0 | 2.0 | N | 100KHz, 0.25V | 0.046 | 0.027 | 0.022 | 1.90 | 2.92 | 2.95 |
| 2R2 | 2.2 | N | 100KHz, 0.25V | 0.059 | 0.029 | 0.022 | 1.63 | 2.41 | 2.95 |
| 2R4 | 2.4 | N | 100KHz, 0.25V | 0.062 | 0.034 | 0.024 | 1.50 | 2.36 | 2.75 |
| 2R7 | 2.7 | N | 100KHz, 0.25V | – | – | 0.027 | – | – | 2.55 |
| 3R3 | 3.3 | N | 100KHz, 0.25V | 0.073 | 0.040 | 0.030 | 1.34 | 1.95 | 2.45 |
| 3R9 | 3.9 | N | 100KHz, 0.25V | 0.081 | – | 0.034 | 1.20 | – | 2.35 |
| 4R1 | 4.1 | N | 100KHz, 0.25V | 0.087 | 0.045 | – | 1.14 | 1.87 | – |
| 4R7 | 4.7 | N | 100KHz, 0.25V | – | 0.052 | 0.042 | – | 1.60 | 2.25 |
| 5R6 | 5.6 | N | 100KHz, 0.25V | – | – | 0.048 | – | – | 2.05 |
| 6R8 | 6.8 | N | 100KHz, 0.25V | 0.105 | 0.068 | 0.054 | 0.95 | 1.51 | 1.85 |
| 8R2 | 8.2 | N | 100KHz, 0.25V | 0.139 | 0.084 | 0.058 | 0.90 | 1.38 | 1.65 |
| 100 | 10 | M | 1KHz, 0.25V | 0.150 | 0.090 | 0.065 | 0.76 | 1.33 | 1.45 |
| 120 | 12 | M | 1KHz, 0.25V | – | 0.120 | 0.082 | – | 1.06 | 1.35 |
| 150 | 15 | M | 1KHz, 0.25V | 0.210 | 0.142 | 0.096 | 0.63 | 1.05 | 1.25 |
| 180 | 18 | M | 1KHz, 0.25V | – | 0.192 | 0.110 | – | 0.90 | 1.15 |
| 220 | 22 | M | 1KHz, 0.25V | 0.275 | 0.208 | 0.140 | 0.56 | 0.86 | 0.98 |
| 270 | 27 | M | 1KHz, 0.25V | 0.452 | 0.222 | 0.170 | 0.48 | 0.75 | 0.90 |
| 330 | 33 | M | 1KHz, 0.25V | 0.455 | 0.257 | 0.210 | 0.44 | 0.72 | 0.80 |
| 390 | 39 | M | 1KHz, 0.25V | – | 0.320 | 0.240 | – | 0.64 | 0.72 |
| 470 | 47 | M | 1KHz, 0.25V | 0.730 | 0.352 | 0.280 | 0.35 | 0.62 | 0.70 |
| 560 | 56 | M | 1KHz, 0.25V | – | 0.459 | 0.340 | – | 0.53 | 0.66 |
| 680 | 68 | M | 1KHz, 0.25V | 0.935 | 0.525 | 0.410 | 0.30 | 0.51 | 0.58 |
| 820 | 82 | M | 1KHz, 0.25V | 1.300 | 0.770 | 0.490 | 0.27 | 0.48 | 0.52 |
| 101 | 100 | M | 1KHz, 0.25V | 1.500 | 0.801 | 0.550 | 0.23 | 0.43 | 0.46 |
| 121 | 120 | M | 1KHz, 0.25V | 1.910 | 0.850 | 0.700 | 0.22 | 0.34 | 0.42 |
| 151 | 150 | M | 1KHz, 0.25V | 2.680 | 1.100 | 0.780 | 0.21 | 0.26 | 0.36 |
| 181 | 180 | M | 1KHz, 0.25V | 3.040 | 1.190 | 0.960 | 0.20 | 0.24 | 0.34 |
| 221 | 220 | M | 1KHz, 0.25V | 3.520 | 1.530 | 1.080 | 0.195 | 0.20 | 0.32 |
| 271 | 270 | M | 1KHz, 0.25V | 4.380 | – | 1.360 | 0.193 | – | 0.28 |
| 331 | 330 | M | 1KHz, 0.25V | 5.560 | 2.030 | 1.820 | 0.190 | 0.19 | 0.24 |
| 391 | 390 | M | 1KHz, 0.25V | – | 3.000 | 2.050 | – | 0.16 | 0.22 |
| 471 | 470 | M | 1KHz, 0.25V | 7.820 | 3.500 | 2.580 | 0.180 | 0.15 | 0.20 |
| 561 | 560 | M | 1KHz, 0.25V | – | 4.080 | 3.160 | – | 0.14 | 0.18 |
| 681 | 680 | M | 1KHz, 0.25V | – | – | 4.040 | – | – | 0.16 |
| 821 | 820 | M | 1KHz, 0.25V | 15.00 | – | 4.900 | 0.120 | – | 0.14 |
| 102 | 1000 | M | 1KHz, 0.25V | – | – | 6.000 | – | – | 0.13 |
| 122 | 1200 | M | 1KHz, 0.25V | – | 8.500 | 7.600 | – | 0.070 | 0.12 |
| 152 | 1522 | M | 1KHz, 0.25V | – | 10.00 | 9.440 | – | 0.065 | 0.10 |
| 182 | 1800 | M | 1KHz, 0.25V | – | 13.15 | 11.70 | – | 0.062 | 0.098 |
| 222 | 2200 | M | 1KHz, 0.25V | – | 19.00 | 13.40 | – | 0.050 | 0.095 |
| 252 | 2500 | M | 1KHz, 0.25V | – | 20.00 | – | – | 0.045 | – |
| 272 | 2700 | M | 1KHz, 0.25V | – | – | 17.30 | – | – | 0.086 |
| 332 | 3300 | M | 1KHz, 0.25V | – | – | 22.10 | – | – | 0.078 |

*Saturation Current: The current when the inductance becomes 30% lower than its initial value.

LMax SMD Power Inductor



LMXS Series – Shielded Style C

FEATURES

- Directly connected electrode on ferrite core
- Available in magnetically shielded
- Low DC resistance
- Suitable for large current
- Available on tape and reel for auto surface mounting

APPLICATIONS

- Power Supply For VTRs
- OA Equipment.
- Notebook PCs
- Portable Communication Equipment
- DC/DC Converters, etc.

CHARACTERISTICS

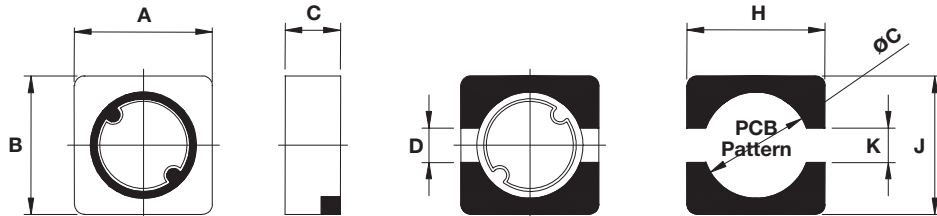
- Rated Current:
0404/40B4/0505/50B5/05C5/0707/07B7/07D7: The DC current when the inductance becomes 30% lower than its initial value.
04C4/1010/10101D/101H: The DC current when the inductance becomes 35% lower than its initial value. (Ta=25°C)
- Operating temperature range: -40 ~ +105°C

INDUCTANCE AND RATED CURRENT RANGES

- | | | |
|--------|---------------|---------------|
| • 0404 | 1.0 ~ 180μH | 1.60 ~ 0.110A |
| • 04B4 | 0.47 ~ 1800μH | 1.84 ~ 0.036A |
| • 04C4 | 1.5 ~ 560μH | 1.90 ~ 0.090A |
| • 0505 | 1.2 ~ 1000μH | 1.77 ~ 0.067A |
| • 05B5 | 1.0 ~ 820μH | 2.70 ~ 0.026A |
| • 05C5 | 1.0 ~ 2500μH | 4.00 ~ 0.045A |
| • 0707 | 1.0 ~ 820μH | 3.28 ~ 0.100A |
| • 07B7 | 1.0 ~ 1500μH | 3.52 ~ 0.095A |
| • 07D7 | 0.36 ~ 1000μH | 9.24 ~ 0.180A |
| • 101B | 1.0 ~ 2200μH | 4.10 ~ 0.100A |
| • 101D | 0.56 ~ 1000μH | 12.6 ~ 0.280A |
| • 101H | 0.56 ~ 39μH | 10.18 ~ 1.30A |
- Electrical specifications at 25°C



DIMENSIONS



mm (inches)

| Type | A | B | C max. | D | H | J | K | øC |
|------|--------------------------------|--------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 0404 | 3.80 ± 0.30 (0.150 ± 0.012) | 3.80 ± 0.30 (0.150 ± 0.012) | 1.25 (0.049) | 1.20 (0.047) | 4.40 (0.173) | 4.40 (0.173) | 1.10 (0.043) | 3.00 (0.118) |
| 04B4 | 3.80 ± 0.30 (0.150 ± 0.012) | 3.80 ± 0.30 (0.150 ± 0.012) | 2.00 (0.079) | 1.20 (0.047) | 4.40 (0.173) | 4.40 (0.173) | 1.10 (0.043) | 3.00 (0.118) |
| 04C4 | 3.80 ± 0.30 (0.150 ± 0.012) | 3.80 ± 0.30 (0.150 ± 0.012) | 3.00 (0.118) | 1.20 (0.047) | 4.40 (0.173) | 4.40 (0.173) | 1.10 (0.043) | 3.00 (0.118) |
| 0505 | 5.00 ± 0.30 (0.197 ± 0.012) | 5.00 ± 0.30 (0.197 ± 0.012) | 1.20 (0.047) | 2.00 (0.079) | 5.90 (0.232) | 5.90 (0.232) | 1.90 (0.075) | 4.20 (0.165) |
| 05B5 | 5.00 ± 0.30 (0.197 ± 0.012) | 5.00 ± 0.30 (0.197 ± 0.012) | 2.00 (0.079) | 2.00 (0.079) | 5.90 (0.232) | 5.90 (0.232) | 1.90 (0.075) | 4.20 (0.165) |
| 05C5 | 5.00 ± 0.30 (0.197 ± 0.012) | 5.00 ± 0.30 (0.197 ± 0.012) | 3.00 (0.118) | 2.00 (0.079) | 5.90 (0.232) | 5.90 (0.232) | 1.90 (0.075) | 4.20 (0.165) |
| 0707 | 6.90 ± 0.30 (0.272 ± 0.012) | 6.90 ± 0.30 (0.272 ± 0.012) | 1.50 (0.059) | 2.50 (0.098) | 7.30 (0.287) | 7.30 (0.287) | 2.00 (0.079) | 5.30 (0.209) |
| 07B7 | 6.90 ± 0.30 (0.272 ± 0.012) | 6.90 ± 0.30 (0.272 ± 0.012) | 1.90 (0.075) | 2.50 (0.098) | 7.30 (0.287) | 7.30 (0.287) | 2.00 (0.079) | 5.30 (0.209) |
| 07D7 | 7.00 ± 0.40 (0.276 ± 0.016) | 7.00 ± 0.40 (0.276 ± 0.016) | 4.30 (0.169) | 1.80 (0.071) | 8.00 (0.315) | 8.00 (0.315) | 1.60 (0.063) | 6.00 (0.236) |
| 101B | 10.0 ± 0.30 (0.394 ± 0.012) | 10.0 ± 0.30 (0.394 ± 0.012) | 1.50 (0.059) | 2.50 (0.098) | 10.6 (0.315) | 10.6 (0.315) | 2.30 (0.091) | 8.00 (0.315) |
| 101D | 10.0 ± 0.30 (0.394 ± 0.012) | 10.0 ± 0.30 (0.394 ± 0.012) | 4.00 (0.157) | 2.50 (0.098) | 10.6 (0.315) | 10.6 (0.315) | 2.30 (0.091) | 8.00 (0.315) |
| 101H | 10.0 ± 0.30 (0.394 ± 0.012) | 10.0 ± 0.30 (0.394 ± 0.012) | 6.70 (0.264) | 2.50 (0.098) | 10.6 (0.315) | 10.6 (0.315) | 2.30 (0.091) | 8.00 (0.315) |



LMax SMD Power Inductor



LMXS Series – Shielded Style C

HOW TO ORDER

| | | | | | | | | |
|---------------------|---------------|---------------------------------------------------------------------------|----------------------|---------------------------------------------------------------------------------------------------|--------------|--------------------|----------------|------------------|
| LM | XS | 0707 | M | R04 | C | T | A | S |
| ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| Family | Series | Size | Tolerance | Inductance | Style | Termination | Special | Packaging |
| LM = Power Inductor | XS = Shielded | 0707 = 7x7xh 07D7 = 7x7xD(h) 101B = 10x10xB(h) (h = see catalog) | M = ±20% N = ±30% | R04 = 0.039µH R39 = 0.390µH 3R9 = 3.900µH 390 = 39.00µH 391 = 390.0µH 392 = 3900µH | | T = Sn Plate | A = Standard | S = 13" Reel |

ELECTRICAL CHARACTERISTICS

0404/04B4/04C4

| Codes | L (µH) | Tolerance | Test Condition | DCR (Ω) max. | | | I sat (A) max* | | |
|-------|--------|-----------|----------------|--------------|--------|-------|----------------|-------|-------|
| | | | | 0404 | 04B4 | 04C4 | 0404 | 04B4 | 04C4 |
| R47 | 0.47 | N | 100KHz, 0.25V | – | 0.017 | – | – | 1.840 | – |
| 1R0 | 1.0 | M, N | 100KHz, 0.25V | 0.060 | 0.030 | – | 1.600 | 1.800 | – |
| 1R2 | 1.2 | M, N | 100KHz, 0.25V | 0.065 | 0.043 | – | 1.400 | 1.700 | – |
| 1R5 | 1.5 | M, N | 100KHz, 0.25V | 0.077 | 0.052 | 0.015 | 1.240 | 1.600 | 1.900 |
| 1R8 | 1.8 | M, N | 100KHz, 0.25V | 0.093 | – | 0.018 | 1.220 | – | 1.760 |
| 2R2 | 2.2 | M, N | 100KHz, 0.25V | 0.125 | 0.058 | 0.020 | 1.200 | 1.500 | 1.670 |
| 2R4 | 2.4 | M, N | 100KHz, 0.25V | 0.139 | – | 0.022 | 0.980 | – | 1.650 |
| 2R5 | 2.5 | M, N | 100KHz, 0.25V | – | 0.059 | – | – | 1.400 | – |
| 2R7 | 2.7 | M, N | 100KHz, 0.25V | – | 0.059 | 0.028 | – | 1.400 | 1.450 |
| 3R3 | 3.3 | M, N | 100KHz, 0.25V | 0.187 | 0.064 | 0.032 | 0.890 | 1.300 | 1.440 |
| 3R5 | 3.5 | M, N | 100KHz, 0.25V | 0.210 | 0.127 | – | 0.850 | 1.300 | – |
| 3R6 | 3.6 | M, N | 100KHz, 0.25V | – | – | 0.035 | – | – | 1.430 |
| 3R9 | 3.9 | M, N | 100KHz, 0.25V | 0.220 | 0.135 | 0.037 | 0.780 | 1.120 | 1.320 |
| 4R3 | 4.3 | M, N | 100KHz, 0.25V | – | – | 0.043 | – | – | 1.000 |
| 4R7 | 4.7 | M, N | 100KHz, 0.25V | 0.240 | 0.146 | 0.045 | 0.710 | 1.100 | 0.970 |
| 5R1 | 5.1 | M, N | 100KHz, 0.25V | – | – | 0.046 | – | – | 0.940 |
| 5R6 | 5.6 | M, N | 100KHz, 0.25V | 0.320 | 0.176 | – | 0.620 | 0.950 | – |
| 6R2 | 6.2 | M, N | 100KHz, 0.25V | – | 0.220 | – | – | 0.910 | – |
| 6R8 | 6.8 | M, N | 100KHz, 0.25V | 0.350 | 0.238 | 0.065 | 0.570 | 0.900 | 0.870 |
| 7R5 | 7.5 | M, N | 100KHz, 0.25V | – | – | 0.079 | – | – | 0.820 |
| 8R2 | 8.2 | M, N | 100KHz, 0.25V | 0.470 | 0.272 | 0.071 | 0.520 | 0.800 | 0.770 |
| 100 | 10 | M | 1KHz, 0.25V | 0.570 | 0.299 | 0.105 | 0.470 | 0.700 | 0.700 |
| 120 | 12 | M | 1KHz, 0.25V | 0.750 | – | 0.119 | 0.430 | – | 0.670 |
| 150 | 15 | M | 1KHz, 0.25V | 0.810 | 0.472 | 0.140 | 0.380 | 0.610 | 0.540 |
| 180 | 18 | M | 1KHz, 0.25V | 1.060 | – | 0.175 | 0.350 | – | 0.500 |
| 220 | 22 | M | 1KHz, 0.25V | 1.150 | 0.592 | 0.201 | 0.320 | 0.520 | 0.480 |
| 270 | 27 | M | 1KHz, 0.25V | 1.670 | 0.630 | 0.227 | 0.290 | 0.440 | 0.400 |
| 330 | 33 | M | 1KHz, 0.25V | 1.840 | 1.075 | 0.287 | 0.280 | 0.430 | 0.350 |
| 390 | 39 | M | 1KHz, 0.25V | 2.310 | – | 0.341 | 0.250 | – | 0.330 |
| 470 | 47 | M | 1KHz, 0.25V | 2.630 | 1.309 | 0.430 | 0.220 | 0.340 | 0.320 |
| 560 | 56 | M | 1KHz, 0.25V | 2.860 | – | 0.471 | 0.200 | – | 0.300 |
| 680 | 68 | M | 1KHz, 0.25V | 3.940 | 2.613 | 0.532 | 0.180 | 0.250 | 0.270 |
| 820 | 82 | M | 1KHz, 0.25V | 4.900 | 2.950 | 0.675 | 0.160 | 0.200 | 0.230 |
| 101 | 100 | M | 1KHz, 0.25V | 5.740 | 3.255 | 0.850 | 0.140 | 0.190 | 0.210 |
| 121 | 120 | M | 1KHz, 0.25V | 7.310 | – | 1.110 | 0.130 | – | 0.200 |
| 151 | 150 | M | 1KHz, 0.25V | 9.080 | 3.550 | 1.230 | 0.120 | 0.120 | 0.170 |
| 181 | 180 | M | 1KHz, 0.25V | 9.500 | – | 1.560 | 0.110 | – | 0.150 |
| 221 | 220 | M | 1KHz, 0.25V | – | 4.900 | 1.800 | – | 0.090 | 0.140 |
| 271 | 270 | M | 1KHz, 0.25V | – | – | 2.200 | – | – | 0.130 |
| 331 | 330 | M | 1KHz, 0.25V | – | 7.280 | 2.640 | – | 0.080 | 0.120 |
| 471 | 470 | M | 1KHz, 0.25V | – | – | 3.820 | – | – | 0.100 |
| 561 | 560 | M | 1KHz, 0.25V | – | – | 4.620 | – | – | 0.090 |
| 681 | 680 | M | 1KHz, 0.25V | – | 13.370 | – | – | 0.070 | – |
| 102 | 1000 | M | 1KHz, 0.25V | – | 19.550 | – | – | 0.065 | – |
| 152 | 1500 | M | 1KHz, 0.25V | – | 36.150 | – | – | 0.038 | – |
| 182 | 1800 | M | 1KHz, 0.25V | – | 57.620 | – | – | 0.036 | – |

*Saturation Current (0404/04B4): The DC current when the inductance becomes 30% lower than its initial value. (Ta=25°C)

*Saturation Current (04C4): The DC current when the inductance becomes 35% lower than its initial value. (Ta=25°C)



LMax SMD Power Inductor



LMXS Series – Shielded Style C

0505/05B5/05C5

| Codes | L (μ H) | Tolerance | Test Condition | DCR (Ω) max. | | | I sat (A) max* | | |
|-------|-----------------|-----------|-------------------|-----------------------|-------|-------|----------------|-------|-------|
| | | | | 0505 | 05B5 | 05C5 | 0505 | 05B5 | 05C5 |
| 1R0 | 1.0 | M, N | 100KHz, 0.25V | – | 0.030 | 0.015 | – | 2.700 | 4.000 |
| 1R1 | 1.1 | M, N | 100KHz, 0.25V | – | – | 0.020 | – | – | 3.870 |
| 1R2 | 1.2 | M, N | 100KHz, 0.25V | 0.050 | 0.044 | 0.022 | 1.770 | 2.150 | 3.800 |
| 1R5 | 1.5 | M, N | 100KHz, 0.25V | 0.069 | – | – | 1.710 | – | – |
| 2R0 | 2.0 | M, N | 100KHz, 0.25V | 0.100 | 0.046 | 0.027 | 1.440 | 1.900 | 2.920 |
| 2R2 | 2.2 | M, N | 100KHz, 0.25V | 0.110 | 0.059 | 0.029 | 1.400 | 1.630 | 2.410 |
| 3R3 | 3.3 | M, N | 100KHz, 0.25V | 0.140 | 0.062 | 0.034 | 1.140 | 1.500 | 2.360 |
| 3R5 | 3.5 | M, N | 100KHz, 0.25V | 0.150 | 0.073 | – | 1.100 | 1.340 | – |
| 4R1 | 4.1 | M, N | 100KHz, 0.25V | – | 0.081 | – | – | 1.200 | – |
| 4R7 | 4.7 | M, N | 100KHz, 0.25V | 0.190 | 0.087 | 0.045 | 0.950 | 1.140 | 1.870 |
| 5R6 | 5.6 | M, N | 100KHz, 0.25V | 0.193 | 0.093 | 0.052 | 0.900 | 1.000 | 1.600 |
| 6R2 | 6.2 | M, N | 100KHz, 0.25V | 0.200 | – | – | 0.840 | – | – |
| 6R8 | 6.8 | M, N | 100KHz, 0.25V | 0.200 | 0.105 | 0.068 | 0.800 | 0.950 | 1.510 |
| 8R2 | 8.2 | M, N | 100KHz, 0.25V | 0.300 | 0.139 | 0.084 | 0.750 | 0.900 | 1.380 |
| 100 | 10 | M | 1KHz, 0.25V | 0.350 | 0.150 | 0.090 | 0.660 | 0.760 | 1.330 |
| 120 | 12 | M | 1KHz, 0.25V | 0.430 | 0.170 | – | 0.620 | 0.660 | – |
| 150 | 15 | M | 1KHz, 0.25V | 0.440 | 0.210 | 0.142 | 0.590 | 0.630 | 1.050 |
| 180 | 18 | M | 1KHz, 0.25V | 0.750 | – | – | 0.570 | – | – |
| 220 | 22 | M | 1KHz, 0.25V | 0.820 | 0.275 | 0.208 | 0.560 | 0.560 | 0.860 |
| 270 | 27 | M | 1KHz, 0.25V | – | – | 0.222 | – | – | 0.750 |
| 330 | 33 | M | 1KHz, 0.25V | 1.160 | 0.455 | 0.257 | 0.430 | 0.440 | 0.720 |
| 390 | 39 | M | 1KHz, 0.25V | – | 0.540 | – | – | 0.380 | – |
| 470 | 47 | M | 1KHz, 0.25V | 1.590 | 0.730 | 0.352 | 0.340 | 0.350 | 0.620 |
| 560 | 56 | M | 1KHz, 0.25V | – | 0.800 | – | – | 0.320 | – |
| 680 | 68 | M | 1KHz, 0.25V | 2.140 | 0.935 | 0.525 | 0.290 | 0.300 | 0.510 |
| 820 | 82 | M | 1KHz, 0.25V | 2.720 | – | – | 0.250 | – | – |
| 101 | 100 | M | 1KHz, 0.25V | 3.550 | 1.500 | 0.801 | 0.220 | 0.230 | 0.430 |
| 121 | 120 | M | 1KHz, 0.25V | 4.890 | 1.910 | 0.850 | 0.200 | 0.220 | 0.340 |
| 151 | 150 | M | 1KHz, 0.25V | 5.200 | 2.680 | 1.100 | 0.190 | 0.210 | 0.260 |
| 181 | 180 | M | 1KHz, 0.25V | 7.550 | 3.045 | 1.190 | 0.170 | 0.200 | 0.240 |
| 221 | 220 | M | 1KHz, 0.25V | 7.760 | 3.520 | 1.530 | 0.150 | 0.195 | 0.200 |
| 271 | 270 | M | 1KHz, 0.25V | 10.13 | 4.380 | – | 0.145 | 0.193 | – |
| 331 | 330 | M | 1KHz, 0.25V | 11.23 | 5.560 | 2.030 | 0.140 | 0.190 | 0.190 |
| 391 | 390 | M | 1KHz, 0.25V | – | – | 3.000 | – | – | 0.160 |
| 471 | 470 | M | 1KHz, 0.25V | 16.86 | 7.820 | 3.500 | 0.098 | 0.180 | 0.150 |
| 561 | 560 | M | 1KHz, 0.25V | 22.78 | 9.790 | 4.450 | 0.097 | 0.170 | 0.140 |
| 681 | 680 | M | 1KHz, 0.25V | 24.87 | – | – | 0.085 | – | – |
| 821 | 820 | M | 1KHz, 0.25V | 28.09 | 15.00 | – | 0.077 | 0.120 | – |
| 102 | 1000 | M | 1KHz, 0.25V | 45.07 | – | – | 0.067 | – | – |
| 122 | 1200 | M | 1KHz, 0.25V | – | – | 8.500 | – | – | 0.070 |
| 152 | 1500 | M | 1KHz, 0.25V | – | – | 10.00 | – | – | 0.065 |
| 182 | 1800 | M | 1KHz, 0.25V | – | – | 13.15 | – | – | 0.062 |
| 222 | 2200 | M | 1KHz, 0.25V | – | – | 19.00 | – | – | 0.050 |
| 252 | 2500 | M | 1KHz, 0.25V | – | – | 20.00 | – | – | 0.045 |

*Saturation Current (0707/07B7/07D7): The DC current when the inductance becomes 30% lower than its initial value.

LMax SMD Power Inductor



LMXS Series – Shielded Style C

0707/07B7/07D7

| Codes | L (μ H) | Tolerance | Test Condition | DCR (Ω) max. | | | I sat (A) max* | | |
|-------|-----------------|-----------|-------------------|-----------------------|-------|--------|----------------|-------|-------|
| | | | | 0707 | 07B7 | 07D7 | 0707 | 07B7 | 07D7 |
| R36 | 0.36 | N | 100KHz, 0.25V | – | – | 0.005 | – | – | 9.240 |
| R56 | 0.56 | N | 100KHz, 0.25V | – | – | 0.006 | – | – | 8.500 |
| R80 | 0.80 | N | 100KHz, 0.25V | – | – | 0.009 | – | – | 5.800 |
| 1R0 | 1.0 | M, N | 100KHz, 0.25V | 0.050 | 0.035 | 0.040 | 3.280 | 3.520 | 2.100 |
| 1R2 | 1.2 | M, N | 100KHz, 0.25V | – | – | 0.040 | – | – | 2.100 |
| 1R5 | 1.5 | M, N | 100KHz, 0.25V | 0.067 | – | 0.040 | 2.530 | – | 2.100 |
| 1R8 | 1.8 | M, N | 100KHz, 0.25V | – | 0.052 | 0.040 | – | 3.050 | 2.090 |
| 2R0 | 2.0 | M, N | 100KHz, 0.25V | 0.085 | – | – | 2.060 | – | – |
| 2R2 | 2.2 | M, N | 100KHz, 0.25V | – | 0.071 | 0.0410 | – | 2.500 | 2.080 |
| 2R5 | 2.5 | M, N | 100KHz, 0.25V | – | – | 0.0410 | – | – | 2.080 |
| 2R7 | 2.7 | M, N | 100KHz, 0.25V | 0.110 | – | – | 1.870 | – | – |
| 3R0 | 3.0 | M, N | 100KHz, 0.25V | – | 0.086 | – | – | 2.150 | – |
| 3R3 | 3.3 | M, N | 100KHz, 0.25V | 0.130 | – | 0.0410 | 1.580 | – | 2.070 |
| 3R9 | 3.9 | M, N | 100KHz, 0.25V | 0.160 | 0.110 | – | 1.460 | 2.010 | – |
| 4R3 | 4.3 | M, N | 100KHz, 0.25V | – | – | 0.041 | – | – | 2.060 |
| 4R7 | 4.7 | M, N | 100KHz, 0.25V | 0.200 | 0.130 | 0.042 | 1.300 | 1.950 | 2.050 |
| 5R6 | 5.6 | M, N | 100KHz, 0.25V | 0.230 | 0.150 | 0.043 | 1.220 | 1.820 | 2.040 |
| 6R8 | 6.8 | M, N | 100KHz, 0.25V | 0.280 | 0.170 | 0.044 | 1.160 | 1.670 | 2.040 |
| 8R2 | 8.2 | M, N | 100KHz, 0.25V | 0.310 | 0.190 | – | 1.130 | 1.520 | – |
| 100 | 10 | M | 1KHz, 0.25V | 0.330 | 0.240 | 0.049 | 1.030 | 1.390 | 2.000 |
| 120 | 12 | M | 1KHz, 0.25V | 0.460 | 0.290 | 0.058 | 0.870 | 1.220 | 1.900 |
| 150 | 15 | M | 1KHz, 0.25V | 0.530 | 0.380 | 0.081 | 0.800 | 1.090 | 1.600 |
| 180 | 18 | M | 1KHz, 0.25V | 0.620 | 0.440 | 0.091 | 0.730 | 1.030 | 1.480 |
| 220 | 22 | M | 1KHz, 0.25V | 0.700 | 0.490 | 0.110 | 0.710 | 0.950 | 1.320 |
| 270 | 27 | M | 1KHz, 0.25V | 0.910 | 0.640 | 0.150 | 0.650 | 0.840 | 1.260 |
| 330 | 33 | M | 1KHz, 0.25V | 1.150 | 0.740 | 0.170 | 0.570 | 0.800 | 1.100 |
| 390 | 39 | M | 1KHz, 0.25V | 1.380 | 0.910 | 0.230 | 0.500 | 0.750 | 1.050 |
| 470 | 47 | M | 1KHz, 0.25V | 1.540 | 1.020 | 0.260 | 0.480 | 0.690 | 1.000 |
| 560 | 56 | M | 1KHz, 0.25V | 1.860 | 1.260 | 0.350 | 0.450 | 0.630 | 0.850 |
| 680 | 68 | M | 1KHz, 0.25V | 2.320 | 1.570 | 0.380 | 0.410 | 0.560 | 0.780 |
| 820 | 82 | M | 1KHz, 0.25V | 2.540 | 1.890 | 0.430 | 0.370 | 0.510 | 0.740 |
| 101 | 100 | M | 1KHz, 0.25V | 3.20 | 2.12 | 0.61 | 0.32 | 0.47 | 0.70 |
| 121 | 120 | M | 1KHz, 0.25V | 4.24 | 2.55 | 0.66 | 0.29 | 0.42 | 0.60 |
| 151 | 150 | M | 1KHz, 0.25V | 4.77 | 3.37 | 0.88 | 0.27 | 0.37 | 0.52 |
| 181 | 180 | M | 1KHz, 0.25V | 6.04 | 3.73 | 0.98 | 0.24 | 0.32 | 0.46 |
| 221 | 220 | M | 1KHz, 0.25V | 7.95 | 4.54 | 1.17 | 0.22 | 0.29 | 0.40 |
| 271 | 270 | M | 1KHz, 0.25V | 10.51 | 5.97 | 1.64 | 0.19 | 0.25 | 0.36 |
| 331 | 330 | M | 1KHz, 0.25V | 11.63 | 7.74 | 1.86 | 0.18 | 0.23 | 0.32 |
| 391 | 390 | M | 1KHz, 0.25V | 12.97 | 9.92 | 2.85 | 0.16 | 0.21 | 0.28 |
| 471 | 470 | M | 1KHz, 0.25V | 16.87 | 12.95 | 3.01 | 0.15 | 0.18 | 0.26 |
| 561 | 560 | M | 1KHz, 0.25V | 22.3 | 14.36 | 3.62 | 0.13 | 0.16 | 0.24 |
| 681 | 680 | M | 1KHz, 0.25V | 25.11 | 18.52 | 4.63 | 0.12 | 0.14 | 0.22 |
| 821 | 820 | M | 1KHz, 0.25V | 28.41 | 20.23 | 5.20 | 0.10 | 0.13 | 0.20 |
| 102 | 1000 | M | 1KHz, 0.25V | – | 28.25 | 6.00 | – | 0.11 | 0.18 |
| 122 | 1200 | M | 1KHz, 0.25V | – | 31.85 | – | – | 0.10 | – |
| 152 | 1500 | M | 1KHz, 0.25V | – | 36.72 | – | – | 0.095 | – |

*Saturation Current (0707/07B7/07D7): The DC current when the inductance becomes 30% lower than its initial value.

LMax SMD Power Inductor



LMXS Series – Shielded Style C

101B/101D/101H

| Codes | L (μ H) | Tolerance | Test Condition | DCR (Ω) max. | | | I sat (A) max* | | |
|-------|-----------------|-----------|-------------------|-----------------------|--------|-------|----------------|-------|-------|
| | | | | 101B | 101D | 101H | 101B | 101D | 101H |
| R56 | 0.56 | N | 100KHz, 0.25V | – | 0.006 | 0.006 | – | 12.60 | 10.18 |
| R80 | 0.80 | N | 100KHz, 0.25V | – | 0.006 | – | – | 12.00 | – |
| 1R0 | 1.0 | M, N | 100KHz, 0.25V | 0.038 | 0.008 | 0.007 | 4.10 | 10.30 | 9.52 |
| 1R5 | 1.5 | M, N | 100KHz, 0.25V | – | 0.0081 | 0.008 | – | 10.00 | 9.50 |
| 1R6 | 1.6 | M, N | 100KHz, 0.25V | – | – | 0.008 | – | – | 9.50 |
| 1R8 | 1.8 | M, N | 100KHz, 0.25V | 0.047 | – | 0.008 | 3.50 | – | 6.30 |
| 2R2 | 2.2 | M, N | 100KHz, 0.25V | – | 0.01 | 0.009 | – | 8.00 | 5.82 |
| 2R4 | 2.4 | M, N | 100KHz, 0.25V | – | – | 0.009 | – | – | 5.71 |
| 2R5 | 2.5 | M, N | 100KHz, 0.25V | – | 0.011 | – | – | 7.50 | – |
| 2R7 | 2.7 | M, N | 100KHz, 0.25V | 0.059 | 0.012 | – | 3.40 | 7.00 | – |
| 3R3 | 3.3 | M, N | 100KHz, 0.25V | 0.063 | 0.012 | 0.010 | 3.00 | 6.60 | 5.18 |
| 3R8 | 3.8 | M, N | 100KHz, 0.25V | – | 0.013 | 0.010 | – | 6.00 | 5.09 |
| 4R3 | 4.3 | M, N | 100KHz, 0.25V | – | – | 0.011 | – | – | 5.08 |
| 4R7 | 4.7 | M, N | 100KHz, 0.25V | 0.086 | 0.022 | 0.015 | 2.60 | 5.70 | 5.00 |
| 5R2 | 5.2 | M, N | 100KHz, 0.25V | – | 0.022 | 0.016 | – | 5.50 | 3.25 |
| 5R6 | 5.6 | M, N | 100KHz, 0.25V | 0.098 | 0.024 | 0.016 | 2.20 | 5.15 | 3.2 |
| 6R8 | 6.8 | M, N | 100KHz, 0.25V | 0.110 | 0.026 | 0.017 | 2.10 | 4.90 | 2.80 |
| 7R0 | 7.0 | M, N | 100KHz, 0.25V | – | 0.027 | – | – | 4.80 | – |
| 8R2 | 8.2 | M, N | 100KHz, 0.25V | 0.130 | 0.032 | – | 1.90 | 4.45 | – |
| 100 | 10 | M | 1KHz, 0.25V | 0.160 | 0.035 | 0.028 | 1.80 | 4.40 | 2.15 |
| 120 | 12 | M | 1KHz, 0.25V | 0.190 | 0.040 | – | 1.48 | 3.65 | – |
| 150 | 15 | M | 1KHz, 0.25V | 0.250 | 0.050 | – | 1.25 | 3.6 | – |
| 180 | 18 | M | 1KHz, 0.25V | 0.290 | 0.060 | – | 1.22 | 2.95 | – |
| 220 | 22 | M | 1KHz, 0.25V | 0.300 | 0.073 | – | 1.20 | 2.90 | – |
| 250 | 25 | M | 1KHz, 0.25V | – | 0.080 | – | – | 2.60 | – |
| 270 | 27 | M | 1KHz, 0.25V | 0.400 | – | – | 0.93 | – | – |
| 330 | 33 | M | 1KHz, 0.25V | 0.460 | 0.093 | – | 0.89 | 2.30 | – |
| 390 | 39 | M | 1KHz, 0.25V | 0.570 | – | 0.050 | 0.81 | – | 1.30 |
| 470 | 47 | M | 1KHz, 0.25V | 0.630 | 0.128 | – | 0.80 | 2.10 | – |
| 560 | 56 | M | 1KHz, 0.25V | 0.780 | – | – | 0.72 | – | – |
| 680 | 68 | M | 1KHz, 0.25V | 0.990 | 0.213 | – | 0.64 | 1.50 | – |
| 820 | 82 | M | 1KHz, 0.25V | 1.170 | – | – | 0.61 | – | – |
| 101 | 100 | M | 1KHz, 0.25V | 1.30 | 0.304 | – | 0.60 | 1.35 | – |
| 121 | 120 | M | 1KHz, 0.25V | 1.63 | 0.340 | – | 0.51 | 1.18 | – |
| 151 | 150 | M | 1KHz, 0.25V | 2.02 | 0.506 | – | 0.43 | 1.15 | – |
| 181 | 180 | M | 1KHz, 0.25V | 2.29 | 0.530 | – | 0.41 | 0.98 | – |
| 221 | 220 | M | 1KHz, 0.25V | 2.96 | 0.756 | – | 0.36 | 0.92 | – |
| 271 | 270 | M | 1KHz, 0.25V | 3.57 | 0.782 | – | 0.33 | 0.72 | – |
| 331 | 330 | M | 1KHz, 0.25V | 4.50 | 1.090 | – | 0.30 | 0.70 | – |
| 391 | 390 | M | 1KHz, 0.25V | – | 1.102 | – | – | 0.55 | – |
| 471 | 470 | M | 1KHz, 0.25V | 6.16 | 1.292 | – | 0.25 | 0.45 | – |
| 561 | 560 | M | 1KHz, 0.25V | 7.63 | 1.572 | – | 0.24 | 0.40 | – |
| 681 | 680 | M | 1KHz, 0.25V | 9.06 | 1.882 | – | 0.21 | 0.35 | – |
| 821 | 820 | M | 1KHz, 0.25V | 11.30 | 2.382 | – | 0.19 | 0.32 | – |
| 102 | 1000 | M | 1KHz, 0.25V | 12.80 | 2.692 | – | 0.17 | 0.28 | – |
| 122 | 1200 | M | 1KHz, 0.25V | 16.50 | – | – | 0.16 | – | – |
| 152 | 1500 | M | 1KHz, 0.25V | 21.30 | – | – | 0.14 | – | – |
| 182 | 1800 | M | 1KHz, 0.25V | 27.80 | – | – | 0.12 | – | – |
| 222 | 2200 | M | 1KHz, 0.25V | 32.00 | – | – | 0.10 | – | – |

*Saturation Current (1010/101D/101H): The DC current when the inductance becomes 35% lower than its initial value. (Ta=25°C)

LMax SMD Power Inductor



LMXS Series – Shielded Style D

FEATURES

- Magnetically shielded against radiation
- 0704 can help achieve longer battery life significantly in handheld communication devices.
- 1309 / 1915 designed for the higher current requirements of portable computers.
- 0704 has ceramic base with gold-plating
- 1309 / 1915 has LCP plastic base

APPLICATIONS

- Portable Telephones
- Personal Computers
- Other Various Electronic Appliances
- DC/DC Converters, etc.

CHARACTERISTICS

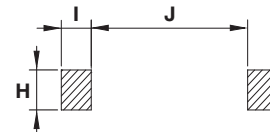
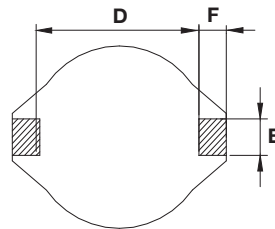
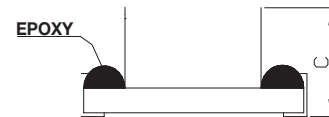
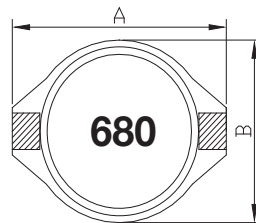
- Saturation Rated Current (IDC): The DC current when the inductance becomes 10% lower than its initial value. (Ta=25°C)
- Temperature Rise Current (I rms): The actual current when temperature of coil becomes Δ40°C. (Ta=25°C)
- Operating temperature range: -40 ~ 85°C

INDUCTANCE AND RATED CURRENT RANGES

- 0704 1.0 ~ 10000μH 3.0 ~ 0.02A
- 1309 1.0 ~ 1000μH 5.0 ~ 0.17A
- 1915 10 ~ 1000μH 3.9 ~ 0.53A
- Electrical specifications at 25°C



DIMENSIONS



mm (inches)

| Type | A max. | B max. | C max. | D | E | F | H | I | J |
|------|------------------|------------------|-----------------|------------------|-----------------|-----------------|-----------------|-----------------|------------------|
| 0704 | 6.60 (0.260) | 4.45 (0.175) | 2.92 (0.115) | 4.32 (0.170) | 1.27 (0.050) | 1.02 (0.040) | 3.56 (0.140) | 1.40 (0.055) | 4.06 (0.160) |
| 1309 | 12.95 (0.510) | 9.40 (0.370) | 5.21 (0.205) | 7.62 (0.300) | 2.54 (0.100) | 2.54 (0.100) | 2.79 (0.110) | 2.92 (0.115) | 7.37 (0.290) |
| 1915 | 18.54 (0.730) | 15.24 (0.600) | 7.62 (0.300) | 12.70 (0.500) | 2.54 (0.100) | 2.54 (0.100) | 2.79 (0.110) | 2.92 (0.115) | 12.45 (0.490) |

HOW TO ORDER

| | | | | | | | | |
|---------------------|---------------|----------------------------------------------------|------------------|---------------------------------------------------------------------------------------------------|--------------|--------------------|----------------|------------------|
| LM | XS | 0704 | M | R04 | D | T | A | S |
| Family | Series | Size | Tolerance | Inductance | Style | Termination | Special | Packaging |
| LM = Power Inductor | XS = Shielded | 0704 = 7x4xh 1309 = 13x9xh (h = see catalog) | M = ±20% | R04 = 0.039μH R39 = 0.390μH 3R9 = 3.900μH 390 = 39.00μH 391 = 390.0μH 392 = 3900μH | T = Sn Plate | A = Standard | S = 13" Reel | |



LMax SMD Power Inductor



LMXS Series – Shielded Style D

ELECTRICAL CHARACTERISTICS

0704

| Codes | L (μ H) | Tolerance | Test Condition | | DCR (Ω) max. | SRF ref (MHz) | Q min. | I rms (A) max. |
|-------|-----------------|-----------|----------------|--------------|--------------------------|------------------|--------|-------------------|
| | | | L | Q | | | | |
| 1R0 | 1.0 | M | 100KHz, 0.1V | 200KHz, 0.1V | 0.040 | 250 | 30 | 3.00 |
| 1R5 | 1.5 | M | 100KHz, 0.1V | 200KHz, 0.1V | 0.045 | 125 | 30 | 2.30 |
| 2R2 | 2.2 | M | 100KHz, 0.1V | 200KHz, 0.1V | 0.050 | 120 | 40 | 1.80 |
| 3R3 | 3.3 | M | 100KHz, 0.1V | 200KHz, 0.1V | 0.055 | 120 | 40 | 1.60 |
| 4R7 | 4.7 | M | 100KHz, 0.1V | 200KHz, 0.1V | 0.060 | 105 | 40 | 1.40 |
| 6R8 | 6.8 | M | 100KHz, 0.1V | 200KHz, 0.1V | 0.065 | 50 | 40 | 1.20 |
| 100 | 10 | M | 100KHz, 0.1V | 200KHz, 0.1V | 0.075 | 38 | 40 | 1.00 |
| 150 | 15 | M | 100KHz, 0.1V | 100KHz, 0.1V | 0.090 | 33 | 40 | 0.80 |
| 220 | 22 | M | 100KHz, 0.1V | 100KHz, 0.1V | 0.11 | 25 | 40 | 0.70 |
| 330 | 33 | M | 100KHz, 0.1V | 100KHz, 0.1V | 0.19 | 20 | 40 | 0.60 |
| 470 | 47 | M | 100KHz, 0.1V | 100KHz, 0.1V | 0.23 | 20 | 40 | 0.50 |
| 680 | 68 | M | 100KHz, 0.1V | 100KHz, 0.1V | 0.29 | 15 | 40 | 0.40 |
| 101 | 100 | M | 100KHz, 0.1V | 100KHz, 0.1V | 0.48 | 10 | 40 | 0.30 |
| 151 | 150 | M | 100KHz, 0.1V | 100KHz, 0.1V | 0.59 | 9 | 40 | 0.26 |
| 221 | 220 | M | 100KHz, 0.1V | 100KHz, 0.1V | 0.90 | 6 | 40 | 0.22 |
| 331 | 330 | M | 100KHz, 0.1V | 100KHz, 0.1V | 1.40 | 5 | 40 | 0.20 |
| 471 | 470 | M | 100KHz, 0.1V | 100KHz, 0.1V | 1.80 | 4 | 40 | 0.19 |
| 681 | 680 | M | 100KHz, 0.1V | 100KHz, 0.1V | 2.20 | 3 | 40 | 0.18 |
| 102 | 1000 | M | 100KHz, 0.1V | 100KHz, 0.1V | 3.40 | 2 | 40 | 0.15 |
| 152 | 1500 | M | 100KHz, 0.1V | 100KHz, 0.1V | 4.20 | 2 | 50 | 0.12 |
| 222 | 2200 | M | 100KHz, 0.1V | 100KHz, 0.1V | 8.50 | 2 | 50 | 0.10 |
| 332 | 3300 | M | 100KHz, 0.1V | 100KHz, 0.1V | 11.0 | 1 | 50 | 0.08 |
| 472 | 4700 | M | 100KHz, 0.1V | 100KHz, 0.1V | 13.9 | 1 | 50 | 0.06 |
| 682 | 6800 | M | 100KHz, 0.1V | 100KHz, 0.1V | 25.0 | 1 | 50 | 0.04 |
| 103 | 10000 | M | 100KHz, 0.1V | 100KHz, 0.1V | 32.8 | 0.8 | 50 | 0.02 |

1309

| Codes | L (μ H) | Tolerance | Test Condition | DCR (Ω) max. | SRF ref (MHz) | IDC (A) max | I rms (A) max. |
|-------|-----------------|-----------|----------------|--------------------------|------------------|----------------|-------------------|
| 1R0 | 1.0 | M | 100KHz, 0.1V | 0.021 | 140 | 5.6 | 5.0 |
| 1R5 | 1.5 | M | 100KHz, 0.1V | 0.022 | 120 | 5.2 | 4.5 |
| 2R2 | 2.2 | M | 100KHz, 0.1V | 0.032 | 80 | 5.0 | 3.8 |
| 3R3 | 3.3 | M | 100KHz, 0.1V | 0.039 | 70 | 3.9 | 3.3 |
| 4R7 | 4.7 | M | 100KHz, 0.1V | 0.054 | 40 | 3.2 | 2.7 |
| 6R8 | 6.8 | M | 100KHz, 0.1V | 0.075 | 38 | 2.8 | 2.2 |
| 100 | 10 | M | 100KHz, 0.1V | 0.101 | 35 | 2.4 | 2.0 |
| 150 | 15 | M | 100KHz, 0.1V | 0.150 | 25 | 2.0 | 1.5 |
| 220 | 22 | M | 100KHz, 0.1V | 0.207 | 19 | 1.6 | 1.3 |
| 330 | 33 | M | 100KHz, 0.1V | 0.334 | 15 | 1.4 | 1.1 |
| 470 | 47 | M | 100KHz, 0.1V | 0.472 | 13 | 1.0 | 0.8 |
| 680 | 68 | M | 100KHz, 0.1V | 0.660 | 10 | 0.9 | 0.7 |
| 101 | 100 | M | 100KHz, 0.1V | 1.110 | 7 | 0.8 | 0.6 |
| 151 | 150 | M | 100KHz, 0.1V | 1.550 | 6 | 0.6 | 0.5 |
| 221 | 220 | M | 100KHz, 0.1V | 2.000 | 5 | 0.5 | 0.37 |
| 102 | 1000 | M | 100KHz, 0.1V | 8.300 | 2 | 0.32 | 0.17 |

LMax SMD Power Inductor



LMXS Series – Shielded Style D

1915

| Codes | L (μ H) | Tolerance | Test Condition | DCR (Ω) max. | SRF ref (MHz) | IDC (A) max. | I rms (A) max. |
|-------|-----------------|-----------|-------------------|--------------------------|------------------|-----------------|-------------------|
| 100 | 10 | M | 100KHz, 0.1V | 0.040 | 30 | 8.0 | 3.9 |
| 150 | 15 | M | 100KHz, 0.1V | 0.048 | 20 | 7.00 | 3.4 |
| 220 | 22 | M | 100KHz, 0.1V | 0.059 | 18 | 6.00 | 3.1 |
| 330 | 33 | M | 100KHz, 0.1V | 0.075 | 14 | 5.00 | 2.8 |
| 470 | 47 | M | 100KHz, 0.1V | 0.097 | 10 | 4.00 | 2.4 |
| 680 | 68 | M | 100KHz, 0.1V | 0.138 | 9.0 | 3.00 | 2.0 |
| 101 | 100 | M | 100KHz, 0.1V | 0.207 | 7.0 | 2.40 | 1.7 |
| 151 | 150 | M | 100KHz, 0.1V | 0.293 | 6.0 | 2.10 | 1.3 |
| 221 | 220 | M | 100KHz, 0.1V | 0.470 | 5.0 | 1.90 | 1.1 |
| 331 | 330 | M | 100KHz, 0.1V | 0.780 | 4.0 | 1.10 | 0.86 |
| 471 | 470 | M | 100KHz, 0.1V | 1.080 | 3.0 | 1.10 | 0.73 |
| 681 | 680 | M | 100KHz, 0.1V | 1.400 | 2.5 | 0.96 | 0.64 |
| 102 | 1000 | M | 100KHz, 0.1V | 2.010 | 2.0 | 0.80 | 0.53 |

LMax SMD Power Inductor



LMXS Series – Shielded Style F

FEATURES

- Magnetically Shielded Construction
- Large Current
- Low DCR

APPLICATIONS

- Telephones
- PCs
- Notebooks
- Hard Disk Drives
- Peripherals

CHARACTERISTICS

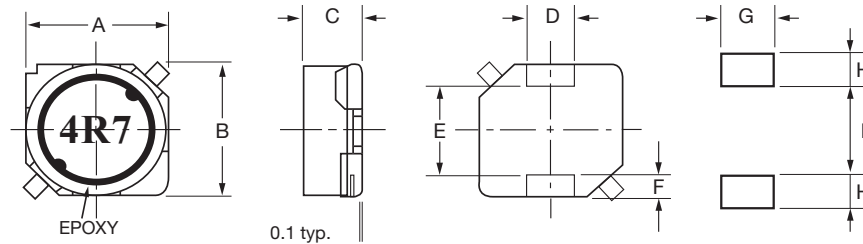
- Rated Current (IDC): The DC current that will cause an approximate ΔT of 40°C. ($T_a=25^\circ\text{C}$)
- Operating temperature range: $-40^\circ\text{C} \sim +125^\circ\text{C}$

INDUCTANCE AND RATED CURRENT RANGES

- 0606 4.7 μH ~ 100.0 μH 1.50 ~ 0.33A
- 06C6 4.7 μH ~ 100.0 μH 1.60 ~ 0.42A
- 0707 3.3 μH ~ 47.0 μH 1.60 ~ 0.54A
- 07C7 3.3 μH ~ 1000.0 μH 1.90 ~ 0.13A
- 07E7 3.3 μH ~ 1000.0 μH 2.30 ~ 0.14A
- 1010 10.0 μH ~ 1500.0 μH 2.50 ~ 0.22A
- 1313 6.0 μH ~ 1500.0 μH 3.60 ~ 0.29A
- 131H 2.0 μH ~ 220.0 μH 6.20 ~ 1.00A
- 131J 1.2 μH ~ 220.0 μH 8.20 ~ 1.30A
- Electrical specifications at 25°C



DIMENSIONS



mm (inches)

| Type | A | B | C | D | E | F | G | H | I |
|------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|-----------------|-----------------|-----------------|
| 0606 | 6.00 ± 0.20 (0.236 ± 0.008) | 6.00 ± 0.20 (0.236 ± 0.008) | 2.50 ± 0.20 (0.099 ± 0.008) | 2.00 ± 0.10 (0.079 ± 0.004) | 3.00 typ (0.118 typ) | 1.50 typ (0.059 typ) | 2.20 (0.087) | 2.00 (0.079) | 2.60 (0.103) |
| 06C6 | 6.00 ± 0.20 (0.236 ± 0.008) | 6.00 ± 0.20 (0.236 ± 0.008) | 2.80 ± 0.20 (0.110 ± 0.008) | 2.00 ± 0.10 (0.079 ± 0.004) | 3.00 typ (0.118 typ) | 1.50 typ (0.059 typ) | 2.20 (0.087) | 2.00 (0.079) | 2.60 (0.103) |
| 0707 | 7.00 ± 0.20 (0.276 ± 0.008) | 7.00 ± 0.20 (0.276 ± 0.008) | 2.80 ± 0.20 (0.110 ± 0.008) | 2.00 ± 0.10 (0.079 ± 0.004) | 4.00 typ (0.193 typ) | 1.50 typ (0.059 typ) | 2.20 (0.087) | 2.00 (0.079) | 3.60 (0.103) |
| 07C7 | 7.00 ± 0.20 (0.276 ± 0.008) | 7.00 ± 0.20 (0.276 ± 0.008) | 3.20 ± 0.20 (0.126 ± 0.008) | 2.00 ± 0.10 (0.079 ± 0.004) | 4.00 typ (0.193 typ) | 1.50 typ (0.059 typ) | 2.20 (0.087) | 2.00 (0.079) | 3.60 (0.142) |
| 07E7 | 7.00 ± 0.20 (0.276 ± 0.008) | 7.00 ± 0.20 (0.276 ± 0.008) | 4.50 ± 0.30 (0.177 ± 0.012) | 2.00 ± 0.10 (0.079 ± 0.004) | 4.00 typ (0.193 typ) | 1.50 typ (0.059 typ) | 2.20 (0.087) | 2.00 (0.079) | 3.60 (0.142) |
| 1010 | 10.1 ± 0.30 (0.398 ± 0.012) | 10.1 ± 0.30 (0.398 ± 0.012) | 4.50 ± 0.30 (0.177 ± 0.012) | 3.00 ± 0.10 (0.118 ± 0.004) | 6.00 ± 0.20 (0.236 ± 0.008) | 2.00 ± 0.15 (0.079 ± 0.006) | 3.20 (0.126) | 2.50 (0.099) | 5.60 (0.220) |
| 1313 | 12.5 ± 0.30 (0.492 ± 0.012) | 12.5 ± 0.30 (0.492 ± 0.012) | 5.50 ± 0.30 (0.217 ± 0.012) | 3.00 ± 0.10 (0.118 ± 0.004) | 8.60 ± 0.30 (0.339 ± 0.012) | 2.00 ± 0.15 (0.079 ± 0.006) | 3.20 (0.126) | 2.50 (0.099) | 8.20 (0.322) |
| 131H | 12.5 ± 0.30 (0.492 ± 0.012) | 12.5 ± 0.30 (0.492 ± 0.012) | 6.50 ± 0.35 (0.256 ± 0.014) | 3.00 ± 0.10 (0.118 ± 0.004) | 8.60 ± 0.30 (0.339 ± 0.012) | 2.00 ± 0.15 (0.079 ± 0.006) | 3.20 (0.126) | 2.50 (0.099) | 8.20 (0.322) |
| 131J | 12.5 ± 0.30 (0.492 ± 0.012) | 12.5 ± 0.30 (0.492 ± 0.012) | 7.50 ± 0.35 (0.295 ± 0.014) | 3.00 ± 0.10 (0.118 ± 0.004) | 8.60 ± 0.30 (0.339 ± 0.012) | 2.00 ± 0.15 (0.079 ± 0.006) | 3.20 (0.126) | 2.50 (0.099) | 8.20 (0.322) |

HOW TO ORDER

| | | | | | | | | |
|---------------------|---------------|------------------------------------------------------|------------------|----------------------------------------------------------------------------------|--------------|--------------------|----------------|------------------|
| LM | XS | 0707 | M | 2R2 | F | T | A | S |
| Family | Series | Size | Tolerance | Inductance | Style | Termination | Special | Packaging |
| LM = Power Inductor | XS = Shielded | 0707 = 7x7xh 07C7 = 7x7xC(h) (h = see catalog) | M = ±20% | 2R2 = 2.20 μH 680 = 68.0 μH 152 = 1500 μH | | T = Sn Plate | A = Standard | S = 13" Reel |



LMax SMD Power Inductor



LMXS Series – Shielded Style F

ELECTRICAL CHARACTERISTICS

0606

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 4R7 | 4.7 | M | 100KHz, 1.0V | 0.050 | 1.50 |
| 6R8 | 6.8 | M | 100KHz, 1.0V | 0.080 | 1.30 |
| 100 | 10 | M | 100KHz, 1.0V | 0.098 | 1.00 |
| 150 | 15 | M | 100KHz, 1.0V | 0.140 | 0.88 |
| 220 | 22 | M | 100KHz, 1.0V | 0.208 | 0.73 |
| 330 | 33 | M | 100KHz, 1.0V | 0.310 | 0.59 |
| 470 | 47 | M | 100KHz, 1.0V | 0.390 | 0.48 |
| 680 | 68 | M | 100KHz, 1.0V | 0.540 | 0.42 |
| 101 | 100 | M | 100KHz, 1.0V | 0.810 | 0.33 |

06C6

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 4R7 | 4.7 | M | 100KHz, 1.0V | 0.050 | 1.60 |
| 6R8 | 6.8 | M | 100KHz, 1.0V | 0.073 | 1.50 |
| 100 | 10 | M | 100KHz, 1.0V | 0.098 | 1.30 |
| 150 | 15 | M | 100KHz, 1.0V | 0.128 | 1.00 |
| 220 | 22 | M | 100KHz, 1.0V | 0.172 | 0.77 |
| 330 | 33 | M | 100KHz, 1.0V | 0.290 | 0.69 |
| 470 | 47 | M | 100KHz, 1.0V | 0.420 | 0.59 |
| 680 | 68 | M | 100KHz, 1.0V | 0.533 | 0.50 |
| 101 | 100 | M | 100KHz, 1.0V | 0.730 | 0.42 |

0707

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 3R3 | 3.3 | M | 100KHz, 1.0V | 0.045 | 1.60 |
| 4R7 | 4.7 | M | 100KHz, 1.0V | 0.054 | 1.50 |
| 6R8 | 6.8 | M | 100KHz, 1.0V | 0.071 | 1.30 |
| 100 | 10 | M | 100KHz, 1.0V | 0.100 | 1.10 |
| 150 | 15 | M | 100KHz, 1.0V | 0.156 | 0.88 |
| 220 | 22 | M | 100KHz, 1.0V | 0.220 | 0.75 |
| 330 | 33 | M | 100KHz, 1.0V | 0.290 | 0.65 |
| 470 | 47 | M | 100KHz, 1.0V | 0.410 | 0.54 |

07C7

| Codes | L(μH) | Tolerance | TestCondition | DCR(Ω)max. | IDC(A)max. |
|-------|-------|-----------|---------------|------------|------------|
| 3R3 | 3.3 | M | 100KHz, 1.0V | 0.028 | 1.90 |
| 4R7 | 4.7 | M | 100KHz, 1.0V | 0.044 | 1.70 |
| 6R8 | 6.8 | M | 100KHz, 1.0V | 0.050 | 1.60 |
| 100 | 10 | M | 100KHz, 1.0V | 0.064 | 1.40 |
| 150 | 15 | M | 100KHz, 1.0V | 0.090 | 1.10 |
| 220 | 22 | M | 100KHz, 1.0V | 0.132 | 0.96 |
| 330 | 33 | M | 100KHz, 1.0V | 0.192 | 0.75 |
| 470 | 47 | M | 100KHz, 1.0V | 0.290 | 0.67 |
| 680 | 68 | M | 100KHz, 1.0V | 0.372 | 0.59 |
| 101 | 100 | M | 100KHz, 1.0V | 0.540 | 0.45 |
| 151 | 150 | M | 100KHz, 1.0V | 0.780 | 0.37 |
| 221 | 220 | M | 100KHz, 1.0V | 1.260 | 0.29 |
| 331 | 330 | M | 100KHz, 1.0V | 2.000 | 0.22 |
| 471 | 470 | M | 100KHz, 1.0V | 2.460 | 0.20 |
| 681 | 680 | M | 100KHz, 1.0V | 3.780 | 0.16 |
| 102 | 1000 | M | 100KHz, 1.0V | 5.740 | 0.13 |

LMax SMD Power Inductor



LMXS Series – Shielded Style F

07E7

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 3R3 | 3.3 | M | 100KHz, 1.0V | 0.024 | 2.30 |
| 4R7 | 4.7 | M | 100KHz, 1.0V | 0.036 | 2.00 |
| 6R8 | 6.8 | M | 100KHz, 1.0V | 0.047 | 1.70 |
| 100 | 10 | M | 100KHz, 1.0V | 0.045 | 1.30 |
| 150 | 15 | M | 100KHz, 1.0V | 0.063 | 1.10 |
| 220 | 22 | M | 100KHz, 1.0V | 0.075 | 0.90 |
| 330 | 33 | M | 100KHz, 1.0V | 0.120 | 0.82 |
| 470 | 47 | M | 100KHz, 1.0V | 0.150 | 0.75 |
| 680 | 68 | M | 100KHz, 1.0V | 0.210 | 0.60 |
| 101 | 100 | M | 100KHz, 1.0V | 0.300 | 0.50 |
| 151 | 150 | M | 100KHz, 1.0V | 0.410 | 0.40 |
| 221 | 220 | M | 100KHz, 1.0V | 0.624 | 0.33 |
| 331 | 330 | M | 100KHz, 1.0V | 0.890 | 0.25 |
| 471 | 470 | M | 100KHz, 1.0V | 1.260 | 0.22 |
| 681 | 680 | M | 100KHz, 1.0V | 1.780 | 0.20 |
| 102 | 1000 | M | 100KHz, 1.0V | 2.740 | 0.14 |

1010

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 100 | 10 | M | 100KHz, 1.0V | 0.044 | 2.50 |
| 150 | 15 | M | 100KHz, 1.0V | 0.057 | 2.20 |
| 220 | 22 | M | 100KHz, 1.0V | 0.071 | 1.90 |
| 330 | 33 | M | 100KHz, 1.0V | 0.100 | 1.60 |
| 470 | 47 | M | 100KHz, 1.0V | 0.120 | 1.40 |
| 680 | 68 | M | 100KHz, 1.0V | 0.170 | 1.20 |
| 101 | 100 | M | 100KHz, 1.0V | 0.240 | 1.00 |
| 151 | 150 | M | 100KHz, 1.0V | 0.420 | 0.79 |
| 221 | 220 | M | 100KHz, 1.0V | 0.570 | 0.65 |
| 331 | 330 | M | 100KHz, 1.0V | 0.820 | 0.54 |
| 471 | 470 | M | 100KHz, 1.0V | 1.240 | 0.47 |
| 681 | 680 | M | 100KHz, 1.0V | 1.920 | 0.38 |
| 102 | 1000 | M | 100KHz, 1.0V | 3.360 | 0.29 |
| 152 | 1500 | M | 100KHz, 1.0V | 4.080 | 0.22 |

1313

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 6R0 | 6 | M | 100KHz, 1.0V | 0.020 | 3.60 |
| 100 | 10 | M | 100KHz, 1.0V | 0.026 | 3.40 |
| 150 | 15 | M | 100KHz, 1.0V | 0.032 | 2.80 |
| 220 | 22 | M | 100KHz, 1.0V | 0.041 | 2.30 |
| 330 | 33 | M | 100KHz, 1.0V | 0.050 | 1.90 |
| 470 | 47 | M | 100KHz, 1.0V | 0.075 | 1.60 |
| 680 | 68 | M | 100KHz, 1.0V | 0.100 | 1.30 |
| 101 | 100 | M | 100KHz, 1.0V | 0.140 | 1.10 |
| 151 | 150 | M | 100KHz, 1.0V | 0.230 | 0.88 |
| 221 | 220 | M | 100KHz, 1.0V | 0.330 | 0.72 |
| 331 | 330 | M | 100KHz, 1.0V | 0.500 | 0.59 |
| 471 | 470 | M | 100KHz, 1.0V | 0.630 | 0.49 |
| 681 | 680 | M | 100KHz, 1.0V | 0.920 | 0.43 |
| 102 | 1000 | M | 100KHz, 1.0V | 1.350 | 0.34 |
| 152 | 1500 | M | 100KHz, 1.0V | 2.080 | 0.29 |

LMax SMD Power Inductor



LMXS Series – Shielded Style F

131H

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 2R0 | 2.0 | M | 100KHz,1.0V | 0.014 | 6.20 |
| 4R2 | 4.2 | M | 100KHz,1.0V | 0.018 | 5.50 |
| 7R0 | 7.0 | M | 100KHz,1.0V | 0.022 | 5.00 |
| 100 | 10 | M | 100KHz,1.0V | 0.025 | 4.80 |
| 150 | 15 | M | 100KHz,1.0V | 0.029 | 4.20 |
| 220 | 22 | M | 100KHz,1.0V | 0.038 | 3.50 |
| 330 | 33 | M | 100KHz,1.0V | 0.049 | 2.80 |
| 470 | 47 | M | 100KHz,1.0V | 0.070 | 2.40 |
| 680 | 68 | M | 100KHz,1.0V | 0.095 | 2.00 |
| 101 | 100 | M | 100KHz,1.0V | 0.150 | 1.60 |
| 221 | 220 | M | 100KHz,1.0V | 0.330 | 1.00 |

131J

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 1R2 | 1.2 | M | 100KHz,1.0V | 0.009 | 8.20 |
| 2R7 | 2.7 | M | 100KHz,1.0V | 0.012 | 7.00 |
| 3R9 | 3.9 | M | 100KHz,1.0V | 0.013 | 6.70 |
| 5R6 | 5.6 | M | 100KHz,1.0V | 0.014 | 6.30 |
| 6R8 | 6.8 | M | 100KHz,1.0V | 0.016 | 5.90 |
| 100 | 10 | M | 100KHz,1.0V | 0.019 | 5.40 |
| 150 | 15 | M | 100KHz,1.0V | 0.022 | 4.70 |
| 220 | 22 | M | 100KHz,1.0V | 0.032 | 4.00 |
| 330 | 33 | M | 100KHz,1.0V | 0.048 | 3.20 |
| 470 | 47 | M | 100KHz,1.0V | 0.064 | 2.70 |
| 680 | 68 | M | 100KHz,1.0V | 0.094 | 2.00 |
| 101 | 100 | M | 100KHz,1.0V | 0.150 | 1.90 |
| 151 | 150 | M | 100KHz,1.0V | 0.210 | 1.50 |
| 221 | 220 | M | 100KHz,1.0V | 0.310 | 1.30 |

LMax SMD Power Inductor



LMXS Series – Shielded Style G

FEATURES

- Magnetically Shielded Construction
- Large Current
- Low DCR

APPLICATIONS

- LCD Televisions
- Notebooks
- Handheld Communication
- DC/DC Converters, etc.

CHARACTERISTICS

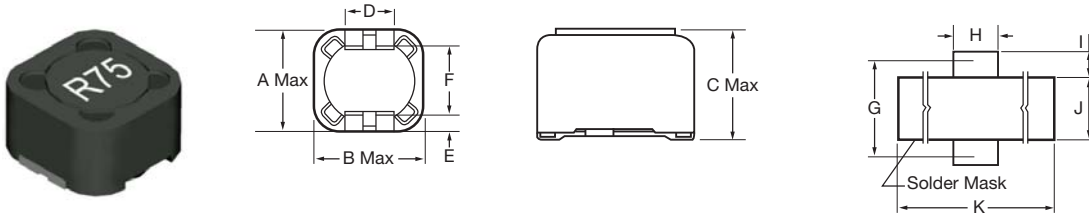
- Rated Current (IDC): The DC current that will cause an approximate ΔT of 40°C. ($T_a=25^\circ\text{C}$)
- Operating temperature range: $-40^\circ\text{C} \sim +125^\circ\text{C}$

INDUCTANCE AND RATED CURRENT RANGES

- 0707 10 μH ~ 1000 μH 1.68 ~ 0.16A
- 07D7 10 μH ~ 1000 μH 1.84 ~ 0.18A
- Electrical specifications at 25°C



DIMENSIONS



mm (inches)

| Type | A max. | B max. | C max. | D | E | F | G | H | I | J | K |
|------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 0707 | 7.50 (0.295) | 7.50 (0.295) | 3.50 (0.138) | 2.00 (0.079) | 1.10 (0.043) | 5.08 (0.200) | 6.30 (0.248) | 3.00 (0.118) | 1.91 (0.075) | 4.50 (0.177) | 10.5 (0.413) |
| 07D7 | 7.50 (0.295) | 7.50 (0.295) | 4.50 (0.177) | 2.00 (0.079) | 1.10 (0.043) | 5.08 (0.200) | 6.30 (0.248) | 3.00 (0.118) | 1.91 (0.075) | 4.50 (0.177) | 10.5 (0.413) |

HOW TO ORDER

| | | | | | | | | |
|---------------------|---------------|------------------------------------------------------|------------------|---------------------------------------------------------------------------------------------------------------|--------------|--------------------|----------------|------------------|
| LM | XS | 0707 | M | R04 | G | T | A | S |
| Family | Series | Size | Tolerance | Inductance | Style | Termination | Special | Packaging |
| LM = Power Inductor | XS = Shielded | 0707 = 7x7xh 07C7 = 7x7xC(h) (h = see catalog) | M = $\pm 20\%$ | 3R9 = 3.900 μH 390 = 39.00 μH 391 = 390 μH 102 = 1000 μH | | T = Sn Plate | A = Standard | S = 13" Reel |

LMax SMD Power Inductor



LMXS Series – Shielded Style G

ELECTRICAL CHARACTERISTICS

0707

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 100 | 10 | M | 100KHz, 1.0V | 0.072 | 1.68 |
| 120 | 12 | M | 100KHz, 1.0V | 0.098 | 1.52 |
| 150 | 15 | M | 100KHz, 1.0V | 0.130 | 1.33 |
| 180 | 18 | M | 100KHz, 1.0V | 0.140 | 1.20 |
| 220 | 22 | M | 100KHz, 1.0V | 0.190 | 1.07 |
| 270 | 27 | M | 100KHz, 1.0V | 0.210 | 0.96 |
| 330 | 33 | M | 100KHz, 1.0V | 0.240 | 0.91 |
| 390 | 39 | M | 100KHz, 1.0V | 0.320 | 0.77 |
| 470 | 47 | M | 100KHz, 1.0V | 0.360 | 0.76 |
| 560 | 56 | M | 100KHz, 1.0V | 0.470 | 0.68 |
| 680 | 68 | M | 100KHz, 1.0V | 0.520 | 0.61 |
| 820 | 82 | M | 100KHz, 1.0V | 0.690 | 0.57 |
| 101 | 100 | M | 100KHz, 1.0V | 0.790 | 0.50 |
| 121 | 120 | M | 100KHz, 1.0V | 0.890 | 0.49 |
| 151 | 150 | M | 100KHz, 1.0V | 1.270 | 0.43 |
| 181 | 180 | M | 100KHz, 1.0V | 1.450 | 0.39 |
| 221 | 220 | M | 100KHz, 1.0V | 1.650 | 0.35 |
| 271 | 270 | M | 100KHz, 1.0V | 2.310 | 0.32 |
| 331 | 330 | M | 100KHz, 1.0V | 2.620 | 0.28 |
| 391 | 390 | M | 100KHz, 1.0V | 2.940 | 0.26 |
| 471 | 470 | M | 100KHz, 1.0V | 4.180 | 0.24 |
| 561 | 560 | M | 100KHz, 1.0V | 4.670 | 0.22 |
| 681 | 680 | M | 100KHz, 1.0V | 5.730 | 0.19 |
| 821 | 820 | M | 100KHz, 1.0V | 6.540 | 0.18 |
| 102 | 1000 | M | 100KHz, 1.0V | 9.440 | 0.16 |

07D7

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 100 | 10 | M | 100KHz, 1.0V | 0.060 | 1.84 |
| 120 | 12 | M | 100KHz, 1.0V | 0.070 | 1.71 |
| 150 | 15 | M | 100KHz, 1.0V | 0.081 | 1.47 |
| 180 | 18 | M | 100KHz, 1.0V | 0.091 | 1.31 |
| 220 | 22 | M | 100KHz, 1.0V | 0.110 | 1.23 |
| 270 | 27 | M | 100KHz, 1.0V | 0.150 | 1.12 |
| 330 | 33 | M | 100KHz, 1.0V | 0.170 | 0.96 |
| 390 | 39 | M | 100KHz, 1.0V | 0.230 | 0.91 |
| 470 | 47 | M | 100KHz, 1.0V | 0.260 | 0.88 |
| 560 | 56 | M | 100KHz, 1.0V | 0.350 | 0.75 |
| 680 | 68 | M | 100KHz, 1.0V | 0.380 | 0.69 |
| 820 | 82 | M | 100KHz, 1.0V | 0.430 | 0.61 |
| 101 | 100 | M | 100KHz, 1.0V | 0.610 | 0.60 |
| 121 | 120 | M | 100KHz, 1.0V | 0.660 | 0.52 |
| 151 | 150 | M | 100KHz, 1.0V | 0.880 | 0.46 |
| 181 | 180 | M | 100KHz, 1.0V | 0.980 | 0.42 |
| 221 | 220 | M | 100KHz, 1.0V | 1.170 | 0.36 |
| 271 | 270 | M | 100KHz, 1.0V | 1.640 | 0.34 |
| 331 | 330 | M | 100KHz, 1.0V | 1.860 | 0.32 |
| 391 | 390 | M | 100KHz, 1.0V | 2.850 | 0.29 |
| 561 | 560 | M | 100KHz, 1.0V | 3.620 | 0.23 |
| 681 | 680 | M | 100KHz, 1.0V | 4.630 | 0.22 |
| 821 | 820 | M | 100KHz, 1.0V | 5.200 | 0.20 |
| 102 | 1000 | M | 100KHz, 1.0V | 6.000 | 0.18 |

LMax SMD Power Inductor



LMXS Series – Shielded Style H

FEATURES

- Magnetically Shielded Construction
- Large Current
- Low DCR

APPLICATIONS

- LCD Televisions
- Notebooks
- Handheld Communication
- DC/DC Converters, etc.

CHARACTERISTICS

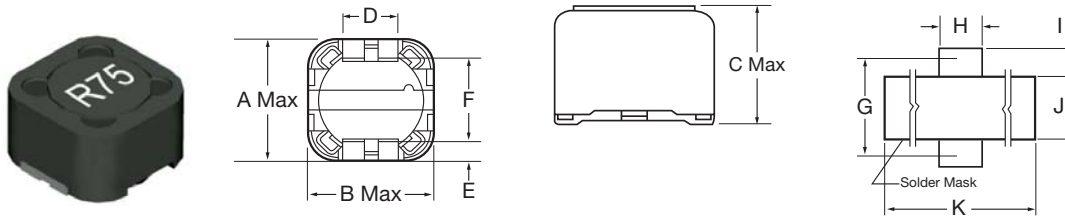
- Rated Current (IDC): The DC current that will cause an approximate ΔT of 40°C. (Ta=25°C)
- Operating temperature range: -40°C ~ +125°C

INDUCTANCE AND RATED CURRENT RANGES

- 1212 3.9 μ H ~ 330 μ H 6.5 ~ 0.50A
- 121G 2.4 μ H ~ 47 μ H 8.0 ~ 2.5A
- 121J 10 μ H ~ 1000 μ H 4.0 ~ 0.40A
- Electrical specifications at 25°C



DIMENSIONS



mm (inches)

| Type | A max. | B max. | C max. | D | E | F | G | H | I | J | K |
|------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-----------------|-----------------|
| 1212 | 12.5 (0.492) | 12.5 (0.492) | 4.50 (0.177) | 5.00 (0.197) | 2.00 (0.079) | 7.60 (0.299) | 10.00 (0.393) | 6.00 (0.236) | 3.00 (0.118) | 7.00 (0.276) | 18.0 (0.709) |
| 121G | 12.5 (0.492) | 12.5 (0.492) | 6.20 (0.244) | 5.00 (0.197) | 2.00 (0.079) | 7.60 (0.299) | 10.00 (0.394) | 6.00 (0.236) | 3.00 (0.118) | 7.00 (0.276) | 18.0 (0.709) |
| 121J | 12.5 (0.492) | 12.5 (0.492) | 8.00 (0.315) | 5.00 (0.197) | 2.00 (0.079) | 7.60 (0.299) | 10.00 (0.394) | 6.00 (0.236) | 3.00 (0.118) | 7.00 (0.276) | 18.0 (0.709) |

HOW TO ORDER

| | | | | | | | | |
|---------------------|---------------|----------------------------------------------------------|------------------|---------------------------------------------------------------------------------------|--------------|--------------------|----------------|------------------|
| LM | XS | 1212 | M | R04 | H | T | A | S |
| Family | Series | Size | Tolerance | Inductance | Style | Termination | Special | Packaging |
| LM = Power Inductor | XS = Shielded | 1212 = 12x12xh 121G = 12x12xG(h) (h = see catalog) | M = $\pm 20\%$ | 3R9 = 3.900 μ H 390 = 39.00 μ H 391 = 390 μ H 102 = 1000 μ H | | T = Sn Plate | A = Standard | S = 13" Reel |

LMax SMD Power Inductor



LMXS Series – Shielded Style H

ELECTRICAL CHARACTERISTICS

1212

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 3R9 | 3.9 | M | 100KHz, 1.0V | 0.015 | 6.50 |
| 4R7 | 4.7 | M | 100KHz, 1.0V | 0.018 | 5.70 |
| 6R8 | 6.8 | M | 100KHz, 1.0V | 0.023 | 4.90 |
| 100 | 10 | M | 100KHz, 1.0V | 0.028 | 4.50 |
| 120 | 12 | M | 100KHz, 1.0V | 0.038 | 4.00 |
| 150 | 15 | M | 100KHz, 1.0V | 0.050 | 3.20 |
| 180 | 18 | M | 100KHz, 1.0V | 0.057 | 3.10 |
| 220 | 22 | M | 100KHz, 1.0V | 0.066 | 2.90 |
| 270 | 27 | M | 100KHz, 1.0V | 0.080 | 2.80 |
| 330 | 33 | M | 100KHz, 1.0V | 0.097 | 2.70 |
| 390 | 39 | M | 100KHz, 1.0V | 0.132 | 2.10 |
| 470 | 47 | M | 100KHz, 1.0V | 0.150 | 1.90 |
| 560 | 56 | M | 100KHz, 1.0V | 0.190 | 1.80 |
| 680 | 68 | M | 100KHz, 1.0V | 0.220 | 1.50 |
| 820 | 82 | M | 100KHz, 1.0V | 0.260 | 1.30 |
| 101 | 100 | M | 100KHz, 1.0V | 0.308 | 1.20 |
| 121 | 120 | M | 100KHz, 1.0V | 0.380 | 1.10 |
| 151 | 150 | M | 100KHz, 1.0V | 0.530 | 0.95 |
| 181 | 180 | M | 100KHz, 1.0V | 0.620 | 0.85 |
| 221 | 220 | M | 100KHz, 1.0V | 0.700 | 0.80 |
| 271 | 270 | M | 100KHz, 1.0V | 0.876 | 0.60 |
| 331 | 330 | M | 100KHz, 1.0V | 0.990 | 0.50 |

121G

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 100 | 10 | M | 100KHz, 1.0V | 0.025 | 4.00 |
| 120 | 12 | M | 100KHz, 1.0V | 0.027 | 3.50 |
| 150 | 15 | M | 100KHz, 1.0V | 0.030 | 3.30 |
| 180 | 18 | M | 100KHz, 1.0V | 0.038 | 3.00 |
| 220 | 22 | M | 100KHz, 1.0V | 0.045 | 2.80 |
| 270 | 27 | M | 100KHz, 1.0V | 0.055 | 2.30 |
| 330 | 33 | M | 100KHz, 1.0V | 0.063 | 2.10 |
| 390 | 39 | M | 100KHz, 1.0V | 0.075 | 2.00 |
| 470 | 47 | M | 100KHz, 1.0V | 0.085 | 1.80 |
| 560 | 56 | M | 100KHz, 1.0V | 0.110 | 1.70 |
| 680 | 68 | M | 100KHz, 1.0V | 0.120 | 1.50 |
| 820 | 82 | M | 100KHz, 1.0V | 0.140 | 1.040 |
| 101 | 100 | M | 100KHz, 1.0V | 0.165 | 1.30 |
| 121 | 120 | M | 100KHz, 1.0V | 0.195 | 1.10 |
| 151 | 150 | M | 100KHz, 1.0V | 0.250 | 1.00 |
| 181 | 180 | M | 100KHz, 1.0V | 0.290 | 0.90 |
| 221 | 220 | M | 100KHz, 1.0V | 0.0400 | 0.80 |
| 271 | 270 | M | 100KHz, 1.0V | 0.0460 | 0.75 |
| 331 | 330 | M | 100KHz, 1.0V | 0.510 | 0.68 |
| 391 | 390 | M | 100KHz, 1.0V | 0.690 | 0.65 |
| 471 | 470 | M | 100KHz, 1.0V | 0.770 | 0.58 |
| 561 | 560 | M | 100KHz, 1.0V | 0.880 | 0.54 |
| 681 | 680 | M | 100KHz, 1.0V | 1.200 | 0.048 |
| 582 | 820 | M | 100KHz, 1.0V | 1.340 | 0.043 |
| 102 | 1000 | M | 100KHz, 1.0V | 1.530 | 0.040 |

LMax SMD Power Inductor



LMXS Series – Shielded Style H

121J

| Codes | L (μ H) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------------|-----------|----------------|-----------------------|--------------|
| 2R4 | 2.4 | M | 100KHz, 1.0V | 0.012 | 8.00 |
| 4R7 | 4.7 | M | 100KHz, 1.0V | 0.016 | 6.80 |
| 7R6 | 7.6 | M | 100KHz, 1.0V | 0.020 | 5.90 |
| 100 | 10 | M | 100KHz, 1.0V | 0.022 | 5.40 |
| 120 | 12 | M | 100KHz, 1.0V | 0.025 | 4.90 |
| 150 | 15 | M | 100KHz, 1.0V | 0.027 | 4.50 |
| 180 | 18 | M | 100KHz, 1.0V | 0.039 | 3.90 |
| 220 | 22 | M | 100KHz, 1.0V | 0.043 | 3.60 |
| 270 | 27 | M | 100KHz, 1.0V | 0.046 | 3.40 |
| 330 | 33 | M | 100KHz, 1.0V | 0.065 | 3.00 |
| 390 | 39 | M | 100KHz, 1.0V | 0.073 | 2.75 |
| 470 | 47 | M | 100KHz, 1.0V | 0.100 | 2.50 |

LMax SMD Power Inductor



LMXS Series – Shielded Style J

FEATURES

- Directly connected electrode on ferrite core
- High power, High saturation inductors
- Ideal inductors for DC/DC converters
- Magnetically shielded against radiation
- Available on tape and reel for automatic surface mounting

APPLICATIONS

- Power Supply for VTRs
- LCD Televisions
- Notebook PCs
- Portable Communication
- DC/DC Converters, etc.

CHARACTERISTICS

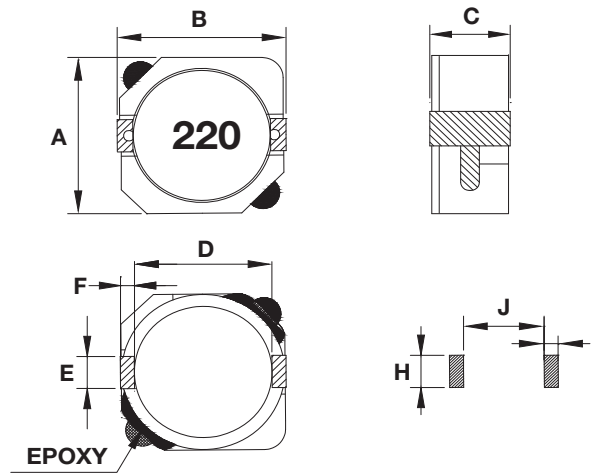
- Rated DC current: The current when the inductance becomes 35% lower than its initial value or the actual current when the temperature of coil increases to $\Delta T=40^{\circ}\text{C}$. The smaller one is defined as Rated DC Current. ($T_a=25^{\circ}\text{C}$)
- Operating temperature range: $-40 \sim 85^{\circ}\text{C}$

INDUCTANCE AND RATED CURRENT RANGES

- 0606 2.5 ~ 100 μH 2.60 ~ 0.40A
- 1010 10 ~ 150 μH 2.70 ~ 0.70A
- 101D 1.3 ~ 330 μH 10.0 ~ 0.70A
- 101E 1.5 ~ 1000 μH 10.5 ~ 0.35A
- Electrical specifications at 25°C



DIMENSIONS



mm (inches)

| Type | A max. | B max. | C max. | D | E | F | H | I | J |
|------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 0606 | 6.20 (0.244) | 6.30 (0.248) | 3.00 (0.118) | 4.70 (0.185) | 2.00 (0.079) | 0.60 (0.024) | 2.60 (0.102) | 1.00 (0.039) | 4.60 (0.181) |
| 1010 | 10.3 (0.406) | 10.4 (0.409) | 3.10 (0.122) | 7.70 (0.303) | 3.00 (0.118) | 1.20 (0.047) | 3.20 (0.126) | 1.60 (0.063) | 7.30 (0.287) |
| 101D | 10.3 (0.406) | 10.4 (0.409) | 4.00 (0.157) | 7.70 (0.303) | 3.00 (0.118) | 1.20 (0.047) | 3.20 (0.126) | 1.60 (0.063) | 7.30 (0.287) |
| 101E | 10.3 (0.406) | 10.4 (0.409) | 5.00 (0.197) | 7.70 (0.303) | 3.00 (0.118) | 1.20 (0.047) | 3.20 (0.126) | 1.60 (0.063) | 7.30 (0.287) |

HOW TO ORDER

| | | | | | | | | |
|---------------------|---------------|--------------------------------------------------------------------------|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|--------------------|----------------|------------------|
| LM | XS | 0606 | N | R04 | J | T | A | S |
| Family | Series | Size | Tolerance | Inductance | Style | Termination | Special | Packaging |
| LM = Power Inductor | XS = Shielded | 0606 = 6x6xh 1010 = 10x10xh 101D = 10x10xD(h) (h = see catalog) | N = $\pm 30\%$ | R04 = 0.039 μH R39 = 0.390 μH 3R9 = 3.900 μH 390 = 39.00 μH 391 = 390.0 μH 392 = 3900 μH | J = Standard | T = Sn Plate | A = Standard | S = 13" Reel |



LMax SMD Power Inductor



LMXS Series – Shielded Style J

0606/1010/101D/101E

| Codes | L (μ H) | Tolerance | Test Condition | DCR (Ω) max. | | | | IDC (A) max. | | | |
|-------|-----------------|-----------|-------------------|-----------------------|------|------|------|--------------|------|------|------|
| | | | | 0606 | 1010 | 101D | 101E | 0606 | 1010 | 101D | 101E |
| 1R3 | 1.3 | N | 100KHz, 0.1V | – | – | 8 | – | – | – | 10.0 | – |
| 1R5 | 1.5 | N | 100KHz, 0.1V | – | – | 8 | 6 | – | – | 10.0 | 10.5 |
| 2R2 | 2.2 | N | 100KHz, 0.1V | – | – | 11 | 7 | – | – | 8.00 | 9.25 |
| 2R5 | 2.5 | N | 100KHz, 0.1V | 17.6 | – | 12 | – | 2.60 | – | 7.50 | – |
| 3R3 | 3.3 | N | 100KHz, 0.1V | 20.3 | – | 13 | 10 | 2.30 | – | 6.50 | 7.80 |
| 3R8 | 3.8 | N | 100KHz, 0.1V | – | – | 17 | – | – | – | 6.00 | – |
| 4R0 | 4.0 | N | 100KHz, 0.1V | 27.0 | – | – | – | 2.10 | – | – | – |
| 4R7 | 4.7 | N | 100KHz, 0.1V | – | – | 21 | 12 | – | – | 5.70 | 6.40 |
| 5R0 | 5.0 | N | 100KHz, 0.1V | 31.1 | – | – | – | 1.85 | – | – | – |
| 5R2 | 5.2 | N | 100KHz, 0.1V | – | – | 22 | – | – | – | 5.50 | – |
| 5R6 | 5.6 | N | 100KHz, 0.1V | – | – | 25 | – | – | – | 5.20 | – |
| 6R0 | 6.0 | N | 100KHz, 0.1V | 41.9 | – | – | – | 1.70 | – | – | – |
| 6R8 | 6.8 | N | 100KHz, 0.1V | – | – | 26 | 18 | – | – | 4.90 | 5.40 |
| 7R0 | 7.0 | N | 100KHz, 0.1V | – | – | 27 | – | – | – | 4.80 | – |
| 8R0 | 8.0 | N | 100KHz, 0.1V | 49.9 | – | – | – | 1.50 | – | – | – |
| 8R2 | 8.2 | N | 100KHz, 0.1V | – | – | – | 20 | – | – | – | 4.85 |
| 100 | 10 | N | 100KHz, 0.1V | 54.0 | 58 | 35 | 26 | 1.30 | 2.70 | 4.40 | 3.45 |
| 120 | 12 | N | 100KHz, 0.1V | 71.6 | 72 | – | 33 | 1.20 | 2.25 | – | 3.40 |
| 150 | 15 | N | 100KHz, 0.1V | 82.4 | 86 | 50 | 41 | 1.10 | 2.22 | 3.60 | 2.83 |
| 180 | 18 | N | 100KHz, 0.1V | 101.5 | 116 | – | 46 | 1.05 | 1.90 | – | 2.62 |
| 220 | 22 | N | 100KHz, 0.1V | 119.0 | 145 | 73 | 61 | 0.95 | 1.78 | 2.90 | 2.44 |
| 270 | 27 | N | 100KHz, 0.1V | 146.0 | 176 | 83 | 69 | 0.85 | 1.63 | 2.80 | 2.24 |
| 330 | 33 | N | 100KHz, 0.1V | 182.5 | 213 | 93 | 84 | 0.76 | 1.46 | 2.30 | 1.88 |
| 390 | 39 | N | 100KHz, 0.1V | 209.5 | 270 | – | 106 | 0.68 | 1.32 | – | 1.70 |
| 470 | 47 | N | 100KHz, 0.1V | 229.5 | 299 | 128 | 130 | 0.60 | 1.18 | 2.10 | 1.56 |
| 560 | 56 | N | 100KHz, 0.1V | 305.0 | 335 | – | 149 | 0.55 | 1.10 | – | 1.39 |
| 680 | 68 | N | 100KHz, 0.1V | 351.0 | 451 | 213 | 201 | 0.48 | 1.04 | 1.50 | 1.36 |
| 820 | 82 | N | 100KHz, 0.1V | 418.5 | 513 | – | 227 | 0.45 | 0.94 | – | 1.20 |
| 101 | 100 | N | 100KHz, 0.1V | 520.0 | 700 | 304 | 253 | 0.40 | 0.84 | 1.35 | 1.09 |
| 121 | 120 | N | 100KHz, 0.1V | – | 765 | – | 303 | – | 0.76 | – | 1.00 |
| 151 | 150 | N | 100KHz, 0.1V | – | 876 | 506 | 370 | – | 0.70 | 1.15 | 0.91 |
| 181 | 180 | N | 100KHz, 0.1V | – | – | 631 | 419 | – | – | 1.03 | 0.84 |
| 221 | 220 | N | 100KHz, 0.1V | – | – | 756 | 500 | – | – | 0.92 | 0.75 |
| 271 | 270 | N | 100KHz, 0.1V | – | – | – | 672 | – | – | – | 0.68 |
| 331 | 330 | N | 100KHz, 0.1V | – | – | 1090 | 812 | – | – | 0.70 | 0.60 |
| 391 | 390 | N | 100KHz, 0.1V | – | – | – | 953 | – | – | – | 0.57 |
| 471 | 470 | N | 100KHz, 0.1V | – | – | – | 1289 | – | – | – | 0.50 |
| 561 | 560 | N | 100KHz, 0.1V | – | – | – | 1430 | – | – | – | 0.47 |
| 681 | 680 | N | 100KHz, 0.1V | – | – | – | 1599 | – | – | – | 0.43 |
| 821 | 820 | N | 100KHz, 0.1V | – | – | – | 1768 | – | – | – | 0.39 |
| 102 | 1000 | N | 100KHz, 0.1V | – | – | – | 1989 | – | – | – | 0.35 |

LMax SMD Power Inductor



LMXS Series – Shielded Style K

FEATURES

- Silver Plated Type, Low cost design
- High power, High saturation inductors
- Ideal inductors for DC/DC converters
- With magnetically shielded against radiation
- Available on tape and reel for automatic surface mounting

APPLICATIONS

- Power Supply for VTRs
- LCD Televisions
- Notebook PCs
- Portable Communication
- DC/DC Converters, etc.

CHARACTERISTICS

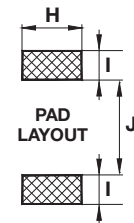
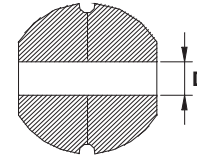
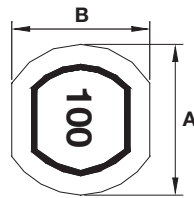
- Rated DC current: The current when the inductance becomes 25% lower than its initial value or the actual current when the temperature of coil increases to $\Delta 40^{\circ}\text{C}$. The smaller one is defined as Rated DC Current. ($T_a=25^{\circ}\text{C}$)
- Operating temperature range: $-40 \sim 85^{\circ}\text{C}$

INDUCTANCE AND RATED CURRENT RANGES

- 0606 10 ~ 68 μH 1.0 ~ 0.42A
- 0807 4.7 ~ 270 μH 3.15 ~ 0.33A
- 1009 10 ~ 470 μH 2.06 ~ 0.33A
- 1312 10 ~ 820 μH 2.65 ~ 0.36A
- Electrical specifications at 25°C



DIMENSIONS



mm (inches)

| Type | A | B | C | D | H | I | J |
|------|--------------------------------|--------------------------------|--------------------------------|-----------------|-----------------|-----------------|-----------------|
| 0606 | 6.20 ± 0.30 (0.244 ± 0.012) | 5.60 ± 0.30 (0.220 ± 0.012) | 3.20 ± 0.30 (0.126 ± 0.012) | 1.70 (0.067) | 5.50 (0.217) | 2.25 (0.089) | 1.70 (0.067) |
| 0807 | 7.80 ± 0.35 (0.307 ± 0.014) | 7.00 ± 0.35 (0.276 ± 0.014) | 4.50 ± 0.40 (0.177 ± 0.016) | 1.90 (0.075) | 7.50 (0.295) | 4.00 (0.157) | 2.00 (0.079) |
| 1009 | 10.0 ± 0.40 (0.394 ± 0.016) | 9.00 ± 0.40 (0.354 ± 0.016) | 5.00 ± 0.50 (0.197 ± 0.020) | 2.50 (0.098) | 9.50 (0.374) | 5.00 (0.197) | 2.50 (0.098) |
| 1312 | 12.6 ± 0.50 (0.496 ± 0.020) | 11.6 ± 0.50 (0.457 ± 0.020) | 5.40 ± 0.50 (0.213 ± 0.020) | 3.00 (0.118) | 12.0 (0.472) | 6.00 (0.236) | 3.00 (0.118) |

HOW TO ORDER

| | | | | | | | | |
|---------------------|---------------|-----------------------------------------------------|----------------------|-----------------------------------------------------------------------------------------------------------------|--------------|--------------------|----------------|------------------|
| LM | XS | 0606 | M | R04 | K | T | A | S |
| Family | Series | Size | Tolerance | Inductance | Style | Termination | Special | Packaging |
| LM = Power Inductor | XS = Shielded | 0606 = 6x6xh 1312 = 13x12xh (h = see catalog) | M = ±20% N = ±30% | 3R9 = 3.900 μH 390 = 39.00 μH 391 = 390.0 μH 392 = 3900 μH | | T = Sn Plate | A = Standard | S = 13" Reel |

LMax SMD Power Inductor



LMXS Series – Shielded Style K

ELECTRICAL CHARACTERISTICS

0606/0807/1009/1312

| Codes | L (μ H) | Tolerance | Test Condition | DCR (Ω) max. | | | | IDC (A) max. | | | |
|-------|-----------------|-----------|-------------------|-----------------------|------|------|------|--------------|------|------|------|
| | | | | 0606 | 0807 | 1009 | 1312 | 0606 | 0807 | 1009 | 1312 |
| 4R7 | 4.7 | N | 100KHz, 0.25V | – | 0.03 | – | – | – | 3.15 | – | – |
| 100 | 10 | M | 2.52MHz, 0.25V | 0.14 | 0.07 | 0.06 | 0.05 | 1.00 | 1.65 | 2.06 | 2.65 |
| 120 | 12 | M | 2.52MHz, 0.25V | 0.16 | 0.07 | 0.07 | 0.05 | 0.94 | 1.57 | 1.94 | 2.50 |
| 150 | 15 | M | 2.52MHz, 0.25V | 0.18 | 0.08 | 0.07 | 0.06 | 0.86 | 1.39 | 1.72 | 2.45 |
| 180 | 18 | M | 2.52MHz, 0.25V | 0.25 | 0.10 | 0.08 | 0.06 | 0.78 | 1.29 | 1.58 | 2.40 |
| 220 | 22 | M | 2.52MHz, 0.25V | 0.32 | 0.13 | 0.08 | 0.07 | 0.76 | 1.12 | 1.42 | 2.20 |
| 270 | 27 | M | 2.52MHz, 0.25V | 0.36 | 0.16 | 0.10 | 0.08 | 0.64 | 1.06 | 1.32 | 2.00 |
| 330 | 33 | M | 2.52MHz, 0.25V | 0.41 | 0.18 | 0.11 | 0.10 | 0.61 | 0.97 | 1.16 | 1.80 |
| 390 | 39 | M | 2.52MHz, 0.25V | 0.47 | 0.18 | 0.12 | 0.11 | 0.53 | 0.91 | 1.10 | 1.65 |
| 470 | 47 | M | 2.52MHz, 0.25V | 0.51 | 0.27 | 0.14 | 0.12 | 0.50 | 0.80 | 1.00 | 1.50 |
| 560 | 56 | M | 2.52MHz, 0.25V | 0.72 | 0.29 | 0.19 | 0.15 | 0.46 | 0.76 | 0.93 | 1.38 |
| 680 | 68 | M | 2.52MHz, 0.25V | 0.82 | 0.33 | 0.21 | 0.17 | 0.42 | 0.68 | 0.85 | 1.26 |
| 820 | 82 | M | 2.52MHz, 0.25V | – | 0.43 | 0.28 | 0.20 | – | 0.62 | 0.79 | 1.14 |
| 101 | 100 | M | 1KHz, 0.25V | – | 0.49 | 0.34 | 0.25 | – | 0.55 | 0.72 | 1.05 |
| 121 | 120 | M | 1KHz, 0.25V | – | 0.68 | 0.37 | 0.28 | – | 0.49 | 0.63 | 0.95 |
| 151 | 150 | M | 1KHz, 0.25V | – | 0.94 | 0.51 | 0.40 | – | 0.44 | 0.55 | 0.85 |
| 181 | 180 | M | 1KHz, 0.25V | – | 1.00 | 0.57 | 0.48 | – | 0.40 | 0.50 | 0.77 |
| 221 | 220 | M | 1KHz, 0.25V | – | 1.18 | 0.78 | 0.52 | – | 0.36 | 0.47 | 0.70 |
| 271 | 270 | M | 1KHz, 0.25V | – | 1.30 | 0.87 | 0.70 | – | 0.33 | 0.41 | 0.63 |
| 331 | 330 | M | 1KHz, 0.25V | – | – | 1.20 | 0.80 | – | – | 0.37 | 0.57 |
| 391 | 390 | M | 1KHz, 0.25V | – | – | 1.34 | 1.08 | – | – | 0.35 | 0.52 |
| 471 | 470 | M | 1KHz, 0.25V | – | – | 1.50 | 1.20 | – | – | 0.33 | 0.48 |
| 561 | 560 | M | 1KHz, 0.25V | – | – | – | 1.34 | – | – | – | 0.44 |
| 681 | 680 | M | 1KHz, 0.25V | – | – | – | 1.78 | – | – | – | 0.40 |
| 821 | 820 | M | 1KHz, 0.25V | – | – | – | 2.00 | – | – | – | 0.36 |

LMax SMD Power Inductor



LMXS Series – Shielded Style L

FEATURES

- Magnetically Shielded Construction
- Large Current
- Low DCR

APPLICATIONS

- LCD Televisions
- Notebooks
- Camcorders
- Digital Cameras
- DC/DC Converters for Portable Devices

CHARACTERISTICS

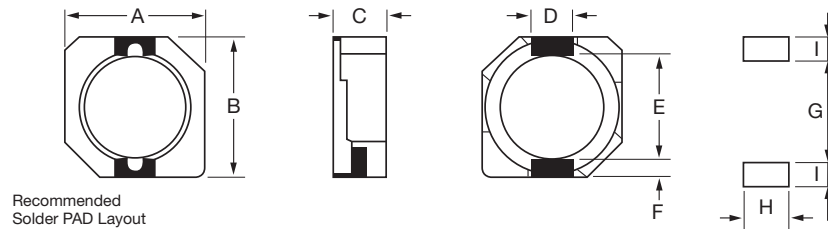
- Rated Current (IDC): The DC current that will cause an approximate ΔT of 40°C. (Ta=25°C)
- Operating temperature range: -40°C ~ +125°C

INDUCTANCE AND RATED CURRENT RANGES

- 1010 0.8uH ~ 47.0uH 11.2 ~ 1.43A
- 101D 1.5uH ~ 330uH 10.0 ~ 0.70A
- Electrical specifications at 25°C



DIMENSIONS



mm (inches)

| Type | A max | B max | C max | D | E | F | G | H | I |
|------|-----------------|-----------------|--------------------------------|--------------------------------|--------------------------------|---------------------------------|-----------------|-----------------|-----------------|
| 1010 | 10.3 (0.398) | 10.5 (0.414) | 3.10 (0.122) | 3.00 ± 0.10 (0.119 ± 0.004) | 7.70 ± 0.30 (0.303 ± 0.012) | 1.20 ± 0.150 (0.048 ± 0.006) | 7.30 (0.288) | 3.20 (0.126) | 1.60 (0.630) |
| 101D | 10.3 (0.398) | 10.5 (0.414) | 3.80 ± 0.20 (0.150 ± 0.008) | 3.00 ± 0.1 (0.119 ± 0.004) | 7.70 ± 0.30 (0.303 ± 0.012) | 1.2 ± 0.15 (0.048 ± 0.006) | 7.30 (0.288) | 3.20 (0.126) | 1.60 (0.630) |

HOW TO ORDER

| | | | | | | | | |
|---------------------|---------------|----------------------------------------------------------|------------------|-----------------------------------------------|--------------|--------------------|----------------|------------------|
| LM | XS | 1010 | N | 2R2 | L | T | A | S |
| Family | Series | Size | Tolerance | Inductance | Style | Termination | Special | Packaging |
| LM = Power Inductor | XS = Shielded | 1010 = 10x10xh 101D = 10x10xD(h) (h = see catalog) | N = ±30% | 0R8 = 0.8µH 470 = 47.00µH 331 = 330.0µH | | T = Sn Plate | A = Standard | S = 13" Reel |

LMax SMD Power Inductor



LMXS Series – Shielded Style L

ELECTRICAL CHARACTERISTICS

1010

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 0R8 | 0.8 | N | 100KHz, 1.0V | 0.0057 | 11.2 |
| 1R5 | 1.5 | N | 100KHz, 1.0V | 0.011 | 8.00 |
| 2R2 | 2.2 | N | 100KHz, 1.0V | 0.0159 | 6.70 |
| 3R3 | 3.3 | N | 100KHz, 1.0V | 0.021 | 5.56 |
| 4R7 | 4.7 | N | 100KHz, 1.0V | 0.030 | 4.55 |
| 6R8 | 6.8 | N | 100KHz, 1.0V | 0.035 | 3.84 |
| 8R0 | 8.0 | N | 100KHz, 1.0V | 0.050 | 3.54 |
| 100 | 10 | N | 100KHz, 1.0V | 0.059 | 3.18 |
| 150 | 15 | N | 100KHz, 1.0V | 0.091 | 2.60 |
| 220 | 22 | N | 100KHz, 1.0V | 0.143 | 2.16 |
| 330 | 33 | N | 100KHz, 1.0V | 0.202 | 1.74 |
| 470 | 47 | N | 100KHz, 1.0V | 0.299 | 1.43 |

101D

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 1R5 | 1.5 | N | 100KHz, 1.0V | 0.0081 | 10.0 |
| 2R5 | 2.5 | N | 100KHz, 1.0V | 0.010 | 7.50 |
| 3R8 | 3.8 | N | 100KHz, 1.0V | 0.013 | 6.00 |
| 4R7 | 4.7 | N | 100KHz, 1.0V | 0.022 | 5.50 |
| 5R2 | 5.2 | N | 100KHz, 1.0V | 0.022 | 5.50 |
| 7R0 | 7.0 | N | 100KHz, 1.0V | 0.027 | 4.80 |
| 100 | 10 | N | 100KHz, 1.0V | 0.035 | 4.40 |
| 150 | 15 | N | 100KHz, 1.0V | 0.050 | 3.60 |
| 220 | 22 | N | 100KHz, 1.0V | 0.073 | 2.90 |
| 330 | 33 | N | 100KHz, 1.0V | 0.093 | 2.30 |
| 470 | 47 | N | 100KHz, 1.0V | 0.128 | 2.10 |
| 680 | 68 | N | 100KHz, 1.0V | 0.213 | 1.50 |
| 101 | 100 | N | 100KHz, 1.0V | 0.304 | 1.35 |
| 151 | 150 | N | 100KHz, 1.0V | 0.506 | 1.15 |
| 221 | 220 | N | 100KHz, 1.0V | 0.756 | 0.92 |
| 331 | 330 | N | 100KHz, 1.0V | 1.090 | 0.70 |

LMax SMD Power Inductor



LMXS Series – Shielded Style M

FEATURES

- Magnetically shielded construction
- RoHS compliance

APPLICATIONS

- LCD TV
- DC to DC Converters
- Notebook PC

CHARACTERISTICS

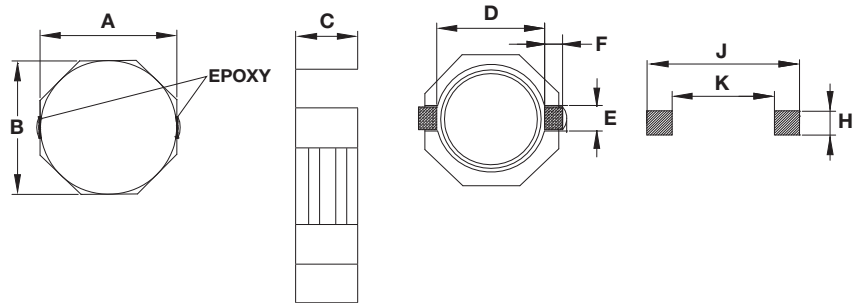
- Rated DC Current: The current when the inductance becomes 35% lower than its initial value.
- Operating temperature: -40 ~ 85°C

INDUCTANCE AND RATED CURRENT RANGES

- 0808 1.0 ~ 100µH 6.5 ~ 0.75A
- 08D8 1.8 ~ 100µH 7.0 ~ 1.05A
- 08E8 1.0 ~ 100µH 9.0 ~ 1.30A
- Electrical specifications at 25°C



DIMENSIONS



mm (inches)

| Type | A | B | C max. | D Ref. | E Ref. | F Ref. | H | J | K |
|------|--------------------------------|--------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 0808 | 8.00 ± 0.30 (0.315 ± 0.012) | 8.00 ± 0.30 (0.315 ± 0.012) | 3.00 (0.118) | 6.30 (0.248) | 2.50 (0.098) | 1.20 (0.047) | 2.80 (0.110) | 10.1 (0.398) | 6.10 (0.240) |
| 08D8 | 8.00 ± 0.30 (0.315 ± 0.012) | 8.00 ± 0.30 (0.315 ± 0.012) | 4.00 (0.157) | 6.30 (0.248) | 2.50 (0.098) | 1.20 (0.047) | 2.80 (0.110) | 10.1 (0.398) | 6.10 (0.240) |
| 08E8 | 8.0 ± 0.30 (0.315 ± 0.012) | 8.00 ± 0.30 (0.315 ± 0.012) | 4.50 (0.177) | 6.30 (0.248) | 2.50 (0.098) | 1.20 (0.047) | 2.80 (0.110) | 10.1 (0.398) | 6.10 (0.240) |

HOW TO ORDER

LM



Family

LM = Power Inductor

XS



Series

XN = Non-shielded

0808



Size

0808 = 8x8xh
08D8 = 8x8xD(h)
(h = see catalog)

N



Tolerance

N = ±30%

R04



Inductance

3R9 = 3.900µH
390 = 39.00µH
391 = 390.0µH
392 = 3900µH

M



Style

T



Termination

T = Sn Plate

A



Special

A = Standard

S



Packaging

S = 13" Reel

LMax SMD Power Inductor



LMXS Series – Shielded Style M

ELECTRICAL CHARACTERISTICS

0808/08D8/08E8

| Codes | L (μ H) | Tolerance | Test Condition | | DCR (Ω) max. | | | I sat (A) max* | | |
|-------|-----------------|-----------|----------------|--------------|-----------------------|------|------|----------------|------|------|
| | | | 0808 | 08D8/08E8 | 0808 | 08D8 | 08E8 | 0808 | 08D8 | 0838 |
| 1R0 | 1.0 | N | 100KHz, 0.25V | 100KHz, 0.1V | 11.0 | – | 9.50 | 6.5 | – | 9.0 |
| 1R2 | 1.2 | N | 100KHz, 0.25V | 100KHz, 0.1V | – | – | 12.2 | – | – | 8.0 |
| 1R8 | 1.8 | N | 100KHz, 0.25V | 100KHz, 0.1V | – | 15.6 | – | – | 7.0 | – |
| 2R0 | 2.0 | N | 100KHz, 0.25V | 100KHz, 0.1V | – | – | 14.0 | – | – | 7.0 |
| 2R5 | 2.5 | N | 100KHz, 0.25V | 100KHz, 0.1V | 15.6 | 17.5 | – | 4.5 | 6.5 | – |
| 3R3 | 3.3 | N | 100KHz, 0.25V | 100KHz, 0.1V | 18.2 | – | – | 4.0 | – | – |
| 3R5 | 3.5 | N | 100KHz, 0.25V | 100KHz, 0.1V | – | 24.0 | – | – | 5.0 | – |
| 3R9 | 3.9 | N | 100KHz, 0.25V | 100KHz, 0.1V | – | – | 19.0 | – | – | 5.9 |
| 4R7 | 4.7 | N | 100KHz, 0.25V | 100KHz, 0.1V | 24.7 | 29.0 | 22.0 | 3.4 | 4.6 | 5.6 |
| 6R0 | 6.0 | N | 100KHz, 0.25V | 100KHz, 0.1V | – | 32.0 | – | – | 4.2 | – |
| 6R8 | 6.8 | N | 100KHz, 0.25V | 100KHz, 0.1V | – | – | 25.0 | – | – | 4.4 |
| 7R3 | 7.3 | N | 100KHz, 0.25V | 100KHz, 0.1V | 39.0 | – | – | 2.80 | – | – |
| 100 | 10 | N | 100KHz, 0.25V | 100KHz, 0.1V | 47.0 | 48.0 | 36.0 | 2.50 | 3.00 | 4.0 |
| 150 | 15 | N | 100KHz, 0.25V | 100KHz, 0.1V | 69.0 | 67.0 | 53.0 | 1.90 | 2.75 | 2.9 |
| 220 | 22 | N | 100KHz, 0.25V | 100KHz, 0.1V | 99.0 | 105 | 75.0 | 1.60 | 2.30 | 2.6 |
| 330 | 33 | N | 100KHz, 0.25V | 100KHz, 0.1V | 156 | 157 | 125 | 1.30 | 1.75 | 2.2 |
| 470 | 47 | N | 100KHz, 0.25V | 100KHz, 0.1V | 195 | 189 | 150 | 1.15 | 1.52 | 1.8 |
| 680 | 68 | N | 100KHz, 0.25V | 100KHz, 0.1V | 286 | 290 | 240 | 0.92 | 1.30 | 1.5 |
| 101 | 100 | N | 100KHz, 0.25V | 100KHz, 0.1V | 430 | 410 | 360 | 0.75 | 1.05 | 1.3 |

*Saturation Current: The current when the inductance becomes 35% lower than its initial value.

LMax SMD Power Inductor



LMXS Series – Shielded Style P

FEATURES

- Magnetically Shielded Construction
- Large Current
- Low DCR

APPLICATIONS

- LCD Televisions
- Notebooks
- Camcorders
- Digital Cameras
- DC/DC Converters for Portable Devices

CHARACTERISTICS

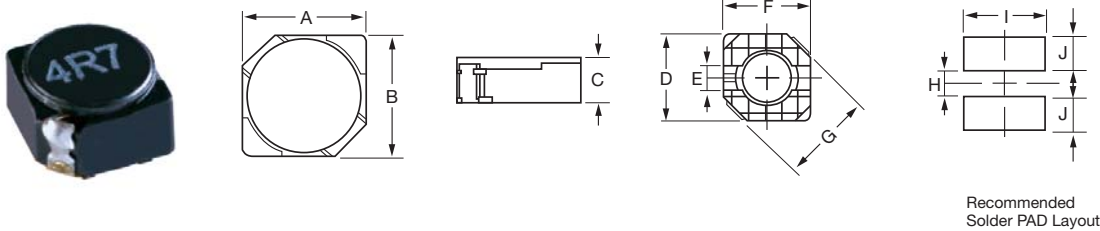
- Rated Current (IDC): The DC current that will cause an approximate ΔT of 40°C. ($T_a=25^\circ\text{C}$)
- Operating temperature range: $-40^\circ\text{C} \sim +125^\circ\text{C}$

INDUCTANCE AND RATED CURRENT RANGES

- 0404 1.5 ~ 33 μH 1.55 ~ 0.32A
- 0505 1.0 ~ 39 μH 1.72 ~ 0.30A
- 05C5 1.2 ~ 180 μH 2.56 ~ 0.22A
- 0606 4.1 ~ 100 μH 1.95 ~ 0.36A
- 06C6 2.6 ~ 100 μH 2.6 ~ 0.42A
- 0707 3.3 ~ 10 μH 3.00 ~ 1.8A
- 07C7 3.0 ~ 100 μH 3.00 ~ 0.54A
- 07D7 3.3 ~ 100 μH 3.50 ~ 0.65A
- Electrical specifications at 25°C



DIMENSIONS



| Type | A | B max | C max | D | E | F max | G max | H | I |
|------|--------------------------------|--------------------------------|-------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 0404 | 3.80 ± 0.50 (0.150 ± 0.012) | 3.80 ± 0.50 (0.150 ± 0.012) | 1.80 ± 0.20 (0.071 ± .008) | 3.80 (0.150) | 1.10 (0.044) | 3.80 (0.150) | 5.00 (0.196) | 1.10 (0.044) | 4.60 (0.181) |
| 0505 | 4.70 ± 0.50 (0.185 ± 0.012) | 4.70 ± 0.50 (0.185 ± 0.012) | 2.00 (0.079) | 4.50 (0.177) | 1.50 (0.059) | 4.50 (0.177) | 6.90 (0.272) | 1.50 (0.059) | 5.30 (0.209) |
| 05C5 | 4.70 ± 0.50 (0.185 ± 0.012) | 4.70 ± 0.50 (0.185 ± 0.012) | 3.00 (0.119) | 4.50 (0.177) | 1.50 (0.059) | 4.50 (0.177) | 6.90 (0.272) | 1.50 (0.059) | 5.30 (0.209) |
| 0606 | 5.7 ± 0.50 (0.225 ± 0.012) | 5.70 ± 0.50 (0.225 ± 0.012) | 2.10 (0.083) | 5.50 (0.217) | 2.00 (0.079) | 5.50 (0.217) | 8.20 (0.323) | 2.00 (0.079) | 6.30 (0.248) |
| 06C6 | 5.70 ± 0.50 (0.225 ± 0.012) | 5.70 ± 0.50 (0.225 ± 0.012) | 3.00 (0.119) | 5.50 (0.217) | 2.00 (0.079) | 5.50 (0.217) | 8.20 (0.323) | 2.00 (0.079) | 6.30 (0.248) |
| 0707 | 6.70 ± 0.40 (0.264 ± 0.158) | 6.70 ± 0.40 (0.264 ± 0.158) | 1.90 (0.075) | 6.50 (0.256) | 2.00 (0.079) | 6.50 (0.256) | 9.50 (0.375) | 2.00 (0.079) | 7.30 (0.288) |
| 07C7 | 6.70 ± 0.50 (0.264 ± 0.012) | 6.70 ± 0.50 (0.264 ± 0.012) | 3.00 (0.119) | 6.50 (0.256) | 2.00 (0.079) | 6.50 (0.256) | 9.50 (0.375) | 2.00 (0.079) | 7.30 (0.288) |
| 07D7 | 6.70 ± 0.50 (0.264 ± 0.012) | 6.70 ± 0.50 (0.264 ± 0.012) | 4.00 (0.158) | 6.50 (0.256) | 2.00 (0.079) | 6.50 (0.256) | 9.50 (0.375) | 2.00 (0.079) | 7.30 (0.288) |

HOW TO ORDER

| | | | | | | | | |
|---------------------|---------------|------------------------------------------------------|-----------|-----------------------------------------------------------------------------------|----------|--------------|--------------|--------------|
| LM | XS | 0505 | M | 2R2 | P | T | A | S |
| Family | Series | Size | Tolerance | Inductance | Style | Termination | Special | Packaging |
| LM = Power Inductor | XS = Shielded | 0505 = 5x5xh 05C5 = 5x5xC(h) (h = see catalog) | M = ±20% | 0R8 = 0.8 μH 470 = 47.00 μH 331 = 330.0 μH | | T = Sn Plate | A = Standard | S = 13" Reel |



LMax SMD Power Inductor



LMXS Series – Shielded Style P

ELECTRICAL CHARACTERISTICS

0404

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 1R5 | 1.5 | M | 100KHz, 1.0V | 0.052 | 1.55 |
| 2R2 | 2.2 | M | 100KHz, 1.0V | 0.072 | 1.20 |
| 3R3 | 3.3 | M | 100KHz, 1.0V | 0.085 | 1.10 |
| 4R7 | 4.7 | M | 100KHz, 1.0V | 0.105 | 0.90 |
| 6R8 | 6.8 | M | 100KHz, 1.0V | 0.170 | 0.73 |
| 100 | 10 | M | 100KHz, 1.0V | 0.210 | 0.55 |
| 150 | 15 | M | 100KHz, 1.0V | 0.295 | 0.45 |
| 220 | 22 | M | 100KHz, 1.0V | 0.430 | 0.40 |
| 330 | 33 | M | 100KHz, 1.0V | 0.675 | 0.32 |

0505

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 1R0 | 1.0 | M | 100KHz, 1.0V | 0.045 | 1.72 |
| 2R2 | 2.2 | M | 100KHz, 1.0V | 0.060 | 1.32 |
| 2R7 | 2.7 | M | 100KHz, 1.0V | 0.070 | 1.28 |
| 3R3 | 3.3 | M | 100KHz, 1.0V | 0.085 | 1.04 |
| 3R9 | 3.9 | M | 100KHz, 1.0V | 0.110 | 0.88 |
| 4R7 | 4.7 | M | 100KHz, 1.0V | 0.128 | 0.84 |
| 5R6 | 5.6 | M | 100KHz, 1.0V | 0.145 | 0.80 |
| 6R8 | 6.8 | M | 100KHz, 1.0V | 0.158 | 0.76 |
| 8R2 | 8.2 | M | 100KHz, 1.0V | 0.185 | 0.68 |
| 100 | 10 | M | 100KHz, 1.0V | 0.200 | 0.61 |
| 120 | 12 | M | 100KHz, 1.0V | 0.210 | 0.56 |
| 150 | 15 | M | 100KHz, 1.0V | 0.240 | 0.50 |
| 180 | 18 | M | 100KHz, 1.0V | 0.338 | 0.48 |
| 220 | 22 | M | 100KHz, 1.0V | 0.397 | 0.41 |
| 270 | 27 | M | 100KHz, 1.0V | 0.441 | 0.35 |
| 330 | 33 | M | 100KHz, 1.0V | 0.694 | 0.32 |
| 390 | 39 | M | 100KHz, 1.0V | 0.709 | 0.30 |

05C5

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 1R2 | 1.2 | M | 100KHz, 1.0V | 0.0236 | 2.56 |
| 1R8 | 1.8 | M | 100KHz, 1.0V | 0.0275 | 2.20 |
| 2R2 | 2.2 | M | 100KHz, 1.0V | 0.0313 | 2.04 |
| 2R7 | 2.7 | M | 100KHz, 1.0V | 0.0433 | 1.60 |
| 3R3 | 3.3 | M | 100KHz, 1.0V | 0.0492 | 1.57 |
| 3R9 | 3.9 | M | 100KHz, 1.0V | 0.0648 | 1.44 |
| 4R7 | 4.7 | M | 100KHz, 1.0V | 0.0720 | 1.32 |
| 5R6 | 5.6 | M | 100KHz, 1.0V | 0.1009 | 1.17 |
| 6R8 | 6.8 | M | 100KHz, 1.0V | 0.1089 | 1.12 |
| 8R2 | 8.2 | M | 100KHz, 1.0V | 0.1175 | 1.04 |
| 100 | 10 | M | 100KHz, 1.0V | 0.1283 | 1.00 |
| 120 | 12 | M | 100KHz, 1.0V | 0.1316 | 0.84 |
| 150 | 15 | M | 100KHz, 1.0V | 0.1490 | 0.76 |
| 180 | 18 | M | 100KHz, 1.0V | 0.1660 | 0.72 |
| 220 | 22 | M | 100KHz, 1.0V | 0.2350 | 0.70 |
| 270 | 27 | M | 100KHz, 1.0V | 0.2610 | 0.58 |
| 330 | 33 | M | 100KHz, 1.0V | 0.3780 | 0.56 |
| 390 | 39 | M | 100KHz, 1.0V | 0.3837 | 0.50 |
| 470 | 47 | M | 100KHz, 1.0V | 0.5870 | 0.48 |
| 560 | 56 | M | 100KHz, 1.0V | 0.6245 | 0.41 |
| 680 | 68 | M | 100KHz, 1.0V | 0.6990 | 0.35 |
| 820 | 82 | M | 100KHz, 1.0V | 0.9148 | 0.32 |
| 101 | 100 | M | 100KHz, 1.0V | 1.020 | 0.29 |
| 121 | 120 | M | 100KHz, 1.0V | 1.270 | 0.27 |
| 151 | 150 | M | 100KHz, 1.0V | 1.350 | 0.24 |
| 181 | 180 | M | 100KHz, 1.0V | 1.540 | 0.22 |



LMax SMD Power Inductor



LMXS Series – Shielded Style P

0606

| Codes | L (µH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 4R1 | 4.1 | M | 100KHz, 1.0V | 0.057 | 1.95 |
| 5R4 | 5.4 | M | 100KHz, 1.0V | 0.076 | 1.6 |
| 6R2 | 6.2 | M | 100KHz, 1.0V | 0.096 | 1.4 |
| 8R9 | 8.9 | M | 100KHz, 1.0V | 0.116 | 1.25 |
| 100 | 10 | M | 100KHz, 1.0V | 0.124 | 1.2 |
| 120 | 12 | M | 100KHz, 1.0V | 0.153 | 1.1 |
| 150 | 15 | M | 100KHz, 1.0V | 0.196 | 0.97 |
| 180 | 18 | M | 100KHz, 1.0V | 0.21 | 0.85 |
| 220 | 22 | M | 100KHz, 1.0V | 0.29 | 0.8 |
| 270 | 27 | M | 100KHz, 1.0V | 0.33 | 0.75 |
| 330 | 33 | M | 100KHz, 1.0V | 0.386 | 0.65 |
| 390 | 39 | M | 100KHz, 1.0V | 0.52 | 0.57 |
| 470 | 47 | M | 100KHz, 1.0V | 0.595 | 0.54 |
| 560 | 56 | M | 100KHz, 1.0V | 0.665 | 0.5 |
| 680 | 68 | M | 100KHz, 1.0V | 0.84 | 0.43 |
| 820 | 82 | M | 100KHz, 1.0V | 0.978 | 0.41 |
| 101 | 100 | M | 100KHz, 1.0V | 1.2 | 0.36 |

06C6

| Codes | L (µH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 2R6 | 2.6 | M | 100KHz, 1.0V | 0.018 | 2.6 |
| 3R0 | 3 | M | 100KHz, 1.0V | 0.024 | 2.4 |
| 4R2 | 4.2 | M | 100KHz, 1.0V | 0.031 | 2.2 |
| 5R3 | 5.3 | M | 100KHz, 1.0V | 0.038 | 1.9 |
| 6R2 | 6.2 | M | 100KHz, 1.0V | 0.045 | 1.8 |
| 8R2 | 8.2 | M | 100KHz, 1.0V | 0.053 | 1.6 |
| 100 | 10 | M | 100KHz, 1.0V | 0.065 | 1.3 |
| 120 | 12 | M | 100KHz, 1.0V | 0.076 | 1.2 |
| 150 | 15 | M | 100KHz, 1.0V | 0.103 | 1.1 |
| 180 | 18 | M | 100KHz, 1.0V | 0.11 | 1 |
| 220 | 22 | M | 100KHz, 1.0V | 0.122 | 0.9 |
| 270 | 27 | M | 100KHz, 1.0V | 0.175 | 0.85 |
| 330 | 33 | M | 100KHz, 1.0V | 0.189 | 0.75 |
| 390 | 39 | M | 100KHz, 1.0V | 0.212 | 0.7 |
| 470 | 47 | M | 100KHz, 1.0V | 0.26 | 0.62 |
| 560 | 56 | M | 100KHz, 1.0V | 0.305 | 0.58 |
| 680 | 68 | M | 100KHz, 1.0V | 0.355 | 0.52 |
| 820 | 82 | M | 100KHz, 1.0V | 0.463 | 0.46 |
| 101 | 100 | M | 100KHz, 1.0V | 0.52 | 0.42 |

LMax SMD Power Inductor



LMXS Series – Shielded Style P

0707

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 3R3 | 3.3 | M | 100KHz, 1.0V | 0.069 | 3 |
| 4R7 | 4.7 | M | 100KHz, 1.0V | 0.075 | 2.4 |
| 6R8 | 6.8 | M | 100KHz, 1.0V | 0.106 | 2.2 |
| 100 | 10 | M | 100KHz, 1.0V | 0.15 | 1.8 |

07C7

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 3R0 | 3 | M | 100KHz, 1.0V | 0.024 | 3 |
| 3R9 | 3.9 | M | 100KHz, 1.0V | 0.027 | 2.6 |
| 5R0 | 5 | M | 100KHz, 1.0V | 0.031 | 2.4 |
| 6R0 | 6 | M | 100KHz, 1.0V | 0.035 | 2.25 |
| 7R3 | 7.3 | M | 100KHz, 1.0V | 0.054 | 2.1 |
| 8R6 | 8.6 | M | 100KHz, 1.0V | 0.058 | 1.85 |
| 100 | 10 | M | 100KHz, 1.0V | 0.065 | 1.7 |
| 120 | 12 | M | 100KHz, 1.0V | 0.07 | 1.55 |
| 150 | 15 | M | 100KHz, 1.0V | 0.084 | 1.4 |
| 180 | 18 | M | 100KHz, 1.0V | 0.095 | 1.32 |
| 220 | 22 | M | 100KHz, 1.0V | 0.128 | 1.2 |
| 270 | 27 | M | 100KHz, 1.0V | 0.142 | 1.05 |
| 330 | 33 | M | 100KHz, 1.0V | 0.165 | 0.97 |
| 390 | 39 | M | 100KHz, 1.0V | 0.21 | 0.86 |
| 470 | 47 | M | 100KHz, 1.0V | 0.238 | 0.8 |
| 560 | 56 | M | 100KHz, 1.0V | 0.277 | 0.73 |
| 680 | 68 | M | 100KHz, 1.0V | 0.304 | 0.65 |
| 820 | 82 | M | 100KHz, 1.0V | 0.39 | 0.6 |
| 101 | 100 | M | 100KHz, 1.0V | 0.535 | 0.54 |

07D7

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 3R3 | 3.3 | M | 100KHz, 1.0V | 0.02 | 3.5 |
| 5R0 | 5 | M | 100KHz, 1.0V | 0.024 | 2.9 |
| 6R0 | 6 | M | 100KHz, 1.0V | 0.027 | 2.5 |
| 7R3 | 7.3 | M | 100KHz, 1.0V | 0.031 | 2.3 |
| 8R6 | 8.6 | M | 100KHz, 1.0V | 0.034 | 2.2 |
| 100 | 10 | M | 100KHz, 1.0V | 0.038 | 2 |
| 120 | 12 | M | 100KHz, 1.0V | 0.053 | 1.7 |
| 150 | 15 | M | 100KHz, 1.0V | 0.057 | 1.6 |
| 180 | 18 | M | 100KHz, 1.0V | 0.092 | 1.5 |
| 220 | 22 | M | 100KHz, 1.0V | 0.096 | 1.3 |
| 270 | 27 | M | 100KHz, 1.0V | 0.109 | 1.2 |
| 330 | 33 | M | 100KHz, 1.0V | 0.124 | 1.1 |
| 390 | 39 | M | 100KHz, 1.0V | 0.138 | 1 |
| 470 | 47 | M | 100KHz, 1.0V | 0.155 | 0.95 |
| 560 | 56 | M | 100KHz, 1.0V | 0.202 | 0.85 |
| 680 | 68 | M | 100KHz, 1.0V | 0.234 | 0.75 |
| 820 | 82 | M | 100KHz, 1.0V | 0.324 | 0.7 |
| 101 | 100 | M | 100KHz, 1.0V | 0.358 | 0.65 |

LMax SMD Power Inductor



LMXS Series – Shielded Style Q, S

FEATURES

- Magnetically Shielded Construction
- Large Current
- Low DCR

APPLICATIONS

- LCD Televisions
- Notebooks
- PDAs
- Digital Cameras
- Handheld Communication
- DC/DC Converters, etc.

CHARACTERISTICS

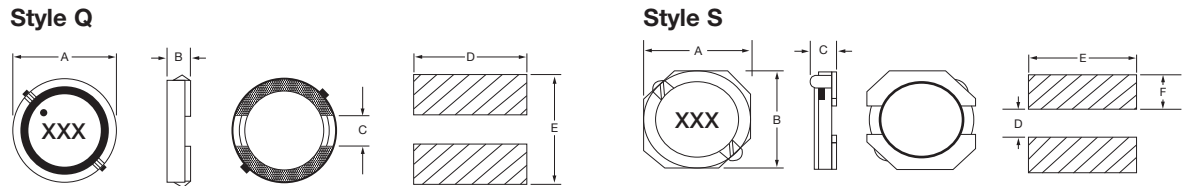
- Rated Current (IDC): The DC current that will cause an approximate ΔT of 40°C. ($T_a=25^\circ\text{C}$)
- Operating temperature range: $-40^\circ\text{C} \sim +125^\circ\text{C}$

INDUCTANCE AND RATED CURRENT RANGES

- 0707 3.3 μH ~ 47 μH 1.68 ~ 0.16A
- 07C7 2.2 μH ~ 68 μH 1.84 ~ 0.18A
- 1010 2.7 μH ~ 33 μH 3.40 ~ 0.80A
- 101B 3.9 μH ~ 33 μH 3.80 ~ 1.20A
- Electrical specifications at 25°C



DIMENSIONS



mm (inches)

| Type | Style | A max | B max | C max | D | E | F |
|------|-------|--------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 0707 | Q | 6.90 ± 0.40 (0.271 ± 0.157) | 1.50 (0.059) | 2.00 (0.079) | 7.30 (0.288) | 7.30 (0.288) | – |
| 07C7 | Q | 7.00 ± 0.50 (0.276 ± 0.020) | 2.80 (0.110) | 2.00 (0.079) | 7.30 (0.288) | 7.30 (0.288) | – |
| 1010 | S | 10.3 (0.406) | 10.3 (0.406) | 1.50 (0.059) | 3.00 (0.119) | 10.4 (0.410) | 3.70 (0.146) |
| 101B | S | 10.3 (0.406) | 10.3 (0.406) | 2.50 (0.099) | 3.0 (0.119) | 10.4 (0.410) | 3.70 (0.146) |

HOW TO ORDER

| | | | | | | | | |
|---------------------|---------------|------------------------------------------------------|------------------|-------------------------------------------------------|--------------|--------------------|----------------|------------------|
| LM | XS | 0707 | M | 2R2 | Q | T | A | S |
| Family | Series | Size | Tolerance | Inductance | Style | Termination | Special | Packaging |
| LM = Power Inductor | XS = Shielded | 0707 = 7x7xh 07C7 = 7x7xC(h) (h = see catalog) | T = ±25% | 2R2 = 2.20 μH 680 = 68.00 μH | Q Q S | T = Sn Plate | A = Standard | S = 13" Reel |

LMax SMD Power Inductor



LMXS Series – Shielded Style Q, S

ELECTRICAL CHARACTERISTICS

0707

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 3R3 | 3.3 | T | 100KHz, 1.0V | 0.085 | 2.10 |
| 4R7 | 4.7 | T | 100KHz, 1.0V | 0.115 | 1.70 |
| 6R8 | 6.8 | T | 100KHz, 1.0V | 0.144 | 1.45 |
| 100 | 10 | T | 100KHz, 1.0V | 0.225 | 1.25 |
| 150 | 15 | T | 100KHz, 1.0V | 0.290 | 1.05 |
| 220 | 22 | T | 100KHz, 1.0V | 0.450 | 0.85 |
| 470 | 47 | T | 100KHz, 1.0V | 0.850 | 0.55 |

07C7

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 2R2 | 2.2 | T | 100KHz, 1.0V | 0.028 | 4.00 |
| 2R7 | 2.7 | T | 100KHz, 1.0V | 0.030 | 3.60 |
| 3R3 | 3.3 | T | 100KHz, 1.0V | 0.035 | 3.20 |
| 4R7 | 4.7 | T | 100KHz, 1.0V | 0.045 | 2.60 |
| 6R8 | 6.8 | T | 100KHz, 1.0V | 0.058 | 2.20 |
| 100 | 10 | T | 100KHz, 1.0V | 0.075 | 1.80 |
| 220 | 22 | T | 100KHz, 1.0V | 0.180 | 1.20 |
| 470 | 47 | T | 100KHz, 1.0V | 0.390 | 0.90 |
| 680 | 68 | T | 100KHz, 1.0V | 0.510 | 0.80 |

1010

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 2R7 | 2.7 | T | 100KHz, 1.0V | 0.042 | 3.40 |
| 3R3 | 3.3 | T | 100KHz, 1.0V | 0.057 | 3.00 |
| 4R7 | 4.7 | T | 100KHz, 1.0V | 0.071 | 2.60 |
| 6R8 | 6.8 | T | 100KHz, 1.0V | 0.106 | 2.10 |
| 100 | 10 | T | 100KHz, 1.0V | 0.140 | 1.80 |
| 220 | 22 | T | 100KHz, 1.0V | 0.288 | 1.20 |
| 470 | 47 | T | 100KHz, 1.0V | 0.654 | 0.80 |

101B

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|-------|--------|-----------|----------------|--------------|--------------|
| 3R9 | 3.9 | T | 100KHz, 1.0V | 0.036 | 3.80 |
| 4R7 | 4.7 | T | 100KHz, 1.0V | 0.039 | 3.60 |
| 6R8 | 6.8 | T | 100KHz, 1.0V | 0.068 | 2.70 |
| 100 | 10 | T | 100KHz, 1.0V | 0.082 | 2.60 |
| 150 | 15 | T | 100KHz, 1.0V | 0.120 | 1.70 |
| 220 | 22 | T | 100KHz, 1.0V | 0.178 | 1.40 |
| 330 | 33 | T | 100KHz, 1.0V | 0.252 | 1.20 |

LMax SMD Power Inductor



LMMN Series – Miniature Style M

FEATURES

- The miniature chip inductors is wound on a special ferrite core.
- 0302/ 03A2/ 0403 are high Q value at high frequency and low DC resistance.
- 03A2/ 0403/ 0605 are low DC resistance, high current capacity, and high impedance characteristics. They are excellent for using as a choke coil in DC power supply circuits.

APPLICATIONS

- Pagers, Cordless Phone
- High Frequency Communication Products
- Personal Computers
- Disk Drives And Computer Peripherals
- DC Power Supply Circuits

CHARACTERISTICS

Except 0202/02A2/02B2/0302

- Rated DC Current: The current when the inductance becomes 10% lower than its initial value or the current when the temperature of coil increases $\Delta T=20^{\circ}\text{C}$. The smaller one is defined as Rated DC Current. ($T_a=25^{\circ}\text{C}$)
- Operating temperature range: $-40 \sim 85^{\circ}\text{C}$

CHARACTERISTICS FOR LWI01/LWI02/LWI03/LWI04

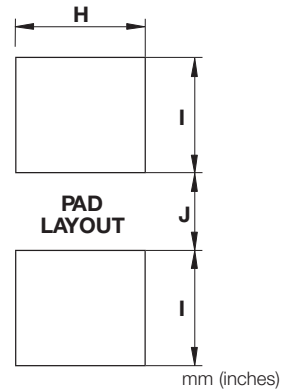
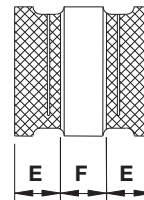
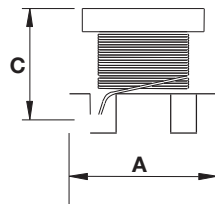
- Rated DC Current (I_{sat}): The current when the inductance becomes 30% typical its initial value ($T_a=25^{\circ}\text{C}$)
- Temperature Rise Current (I_{rms}): The actual current when the temperature of coil becomes $\Delta T=40^{\circ}\text{C}$ ($T_a=25^{\circ}\text{C}$)
- Operating temperature range: $-40 \sim 105^{\circ}\text{C}$

INDUCTANCE AND RATED CURRENT RANGES

- | | | |
|------------|----------------------------|---------------|
| • 0202 | 1.00 ~ 10 μH | 2.80 ~ 0.65A |
| • 02A2 | 1.00 ~ 10 μH | 3.70 ~ 0.90A |
| • 02B2 | 1.00 ~ 22 μH | 2.30 ~ 0.51A |
| • 0302 | 1.00 ~ 100 μH | 1.00 ~ 0.1A |
| • 03A2 | 1.00 ~ 560 μH | 0.445 ~ 0.04A |
| • 0403 | 1.00 ~ 2200 μH | 0.50 ~ 0.03A |
| • 0302 (C) | 0.47 ~ 120 μH | 3.40 ~ 0.17A |
| • 03A2 (C) | 1.00 ~ 560 μH | 1.00 ~ 0.06A |
| • 0403 (C) | 1.00 ~ 470 μH | 1.08 ~ 0.09A |
| • 0605 (C) | 0.12 ~ 10000 μH | 6.00 ~ 0.05A |
- Electrical specifications at 25°C



DIMENSIONS



| Type | A | B | C | E | F | H | I | J |
|-----------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|-----------------|-----------------|-----------------|
| 0202 | 2.50 ± 0.20 (0.098 ± 0.008) | 2.00 ± 0.20 (0.079 ± 0.008) | 1.00 max. (0.039) | 0.40 ± 0.20 (0.016 ± 0.008) | 1.00 min. (0.039) | 2.10 (0.083) | 0.90 (0.035) | 0.80 (0.031) |
| 02A2 | 2.50 ± 0.20 (0.098 ± 0.008) | 2.00 ± 0.20 (0.079 ± 0.008) | 1.25 max. (0.049) | 0.40 ± 0.20 (0.016 ± 0.008) | 1.00 min. (0.039) | 2.10 (0.083) | 0.90 (0.035) | 0.80 (0.031) |
| 02B2 | 2.50 ± 0.20 (0.098 ± 0.008) | 2.50 ± 0.20 (0.098 ± 0.008) | 1.05 max. (0.041) | 0.85 ref (0.033) | 0.85 ref (0.033) | 2.50 (0.098) | 1.20 (0.047) | 0.80 (0.031) |
| 0302 / 0302 (C) | 3.20 ± 0.30 (0.126 ± 0.012) | 2.50 ± 0.20 (0.098 ± 0.008) | 1.55 ± 0.30 (0.061 ± 0.012) | 1.05 ± 0.30 (0.041 ± 0.012) | 1.05 ± 0.30 (0.041 ± 0.012) | 2.00 (0.079) | 1.50 (0.059) | 1.00 (0.039) |
| 03A2 / 03A2 (C) | 3.20 ± 0.30 (0.126 ± 0.012) | 2.50 ± 0.20 (0.098 ± 0.008) | 2.00 ± 0.30 (0.079 ± 0.012) | 1.05 ± 0.30 (0.041 ± 0.012) | 1.05 ± 0.30 (0.041 ± 0.012) | 2.00 (0.079) | 1.50 (0.059) | 1.00 (0.039) |
| 0403 / 0403 (C) | 4.50 ± 0.30 (0.177 ± 0.012) | 3.20 ± 0.20 (0.126 ± 0.008) | 2.60 ± 0.30 (0.102 ± 0.012) | 1.00 min. (0.039) | 1.00 min. (0.039) | 3.00 (0.118) | 2.00 (0.079) | 1.20 (0.047) |
| 0605 (C) | 5.70 ± 0.30 (0.224 ± 0.012) | 5.00 ± 0.30 (0.197 ± 0.012) | 4.70 ± 0.50 (0.185 ± 0.020) | 1.30 min. (0.051) | 1.70 min. (0.067) | 5.00 (0.197) | 2.00 (0.079) | 2.00 (0.079) |

LMax SMD Power Inductor



LMMN Series – Miniature Style M

HOW TO ORDER

| | | | | | | | | |
|---------------------|-------------------|-----------------------------------|---------------------------------------------|----------------------------------------------------------------------------------|--------------|--------------------|---------------------------|------------------|
| LM | MN | 0202 | N | R04 | M | T | A | R |
| | | | | | | | | |
| Family | Series | Size | Tolerance | Inductance | Style | Termination | Special | Packaging |
| LM = Power Inductor | XN = Non-shielded | 0202 = 2x2xh (h = see catalog) | J = ±5% K = ±10% M = ±20% N = ±30% | R39 = 0.390µH 3R9 = 3.900µH 390 = 39.00µH 391 = 390.0µH 392 = 3900µH | | T = Sn Plate | A = Standard C = Choke | R = 7" Reel |

ELECTRICAL CHARACTERISTICS

0202

| Codes | L (µH) | Tolerance | Test Condition | DCR (Ω) max. | I rms (A) Typical | I sat (A) Typical |
|-------|--------|-----------|----------------|--------------|-------------------|-------------------|
| 1R0 | 1.00 | M | 1MHz, 0.1V | 0.085 | 1.70 | 2.00 |
| 1R5 | 1.50 | M | 1MHz, 0.1V | 0.128 | 1.40 | 1.70 |
| 2R2 | 2.20 | M | 1MHz, 0.1V | 0.19 | 1.10 | 1.40 |
| 3R3 | 3.30 | M | 1MHz, 0.1V | 0.304 | 0.94 | 1.20 |
| 4R7 | 4.70 | M | 1MHz, 0.1V | 0.44 | 0.78 | 0.98 |
| 6R8 | 6.80 | M | 1MHz, 0.1V | 0.541 | 0.70 | 0.82 |
| 100 | 10.0 | M | 1MHz, 0.1V | 0.854 | 0.52 | 0.65 |

02A2

| Codes | L (µH) | Tolerance | Test Condition | DCR (Ω) max. | I rms (A) Typical | I sat (A) Typical |
|-------|--------|-----------|----------------|--------------|-------------------|-------------------|
| 1R0 | 1.00 | M | 1MHz, 0.1V | 0.088 | 1.80 | 2.70 |
| 1R5 | 1.50 | M | 1MHz, 0.1V | 0.126 | 1.50 | 2.20 |
| 2R2 | 2.20 | M | 1MHz, 0.1V | 0.155 | 1.30 | 2.00 |
| 3R3 | 3.30 | M | 1MHz, 0.1V | 0.272 | 1.00 | 1.60 |
| 4R7 | 4.70 | M | 1MHz, 0.1V | 0.45 | 0.81 | 1.20 |
| 5R6 | 5.60 | M | 1MHz, 0.1V | 0.45 | 0.72 | 1.15 |
| 6R8 | 6.80 | M | 1MHz, 0.1V | 0.612 | 0.66 | 1.10 |
| 100 | 10.0 | M | 1MHz, 0.1V | 0.756 | 0.59 | 0.90 |

02B2

| Codes | L (µH) | Tolerance | Test Condition | DCR (Ω) max. | I rms (A) Typical | I sat (A) Typical |
|-------|--------|-----------|----------------|--------------|-------------------|-------------------|
| 1R0 | 1.00 | M | 1MHz, 0.1V | 0.085 | 1.90 | 2.30 |
| 1R5 | 1.50 | M | 1MHz, 0.1V | 0.115 | 1.50 | 1.90 |
| 2R2 | 2.20 | M | 1MHz, 0.1V | 0.168 | 1.20 | 1.50 |
| 3R3 | 3.30 | M | 1MHz, 0.1V | 0.239 | 1.10 | 1.30 |
| 4R7 | 4.70 | M | 1MHz, 0.1V | 0.316 | 0.90 | 1.10 |
| 5R6 | 5.60 | M | 1MHz, 0.1V | 0.42 | 0.83 | 0.98 |
| 6R8 | 6.80 | M | 1MHz, 0.1V | 0.487 | 0.80 | 0.90 |
| 8R2 | 8.20 | M | 1MHz, 0.1V | 0.548 | 0.71 | 0.84 |
| 100 | 10.0 | M | 1MHz, 0.1V | 0.61 | 0.68 | 0.79 |
| 220 | 22.0 | M | 1MHz, 0.1V | 1.552 | 0.40 | 0.51 |

LMax SMD Power Inductor



LMMN Series – Miniature Style M

0302

| Codes | L (µH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. | SRF (MHz) min. |
|-------|--------|-----------|----------------|--------------|--------------|----------------|
| 1R0 | 1.00 | N | 1MHz, 0.1V | 0.078 | 1.00 | 100 |
| 1R5 | 1.50 | N | 1MHz, 0.1V | 0.068 | 1.20 | 100 |
| 2R2 | 2.20 | M | 1MHz, 0.1V | 0.126 | 0.79 | 64.0 |
| 3R3 | 3.30 | M | 1MHz, 0.1V | 0.18 | 0.70 | 50.0 |
| 4R7 | 4.70 | M | 1MHz, 0.1V | 0.195 | 0.65 | 43.0 |
| 100 | 10.0 | K | 1MHz, 0.1V | 0.42 | 0.45 | 26.0 |
| 150 | 15.0 | K | 1MHz, 0.1V | 0.75 | 0.30 | 22.0 |
| 220 | 22.0 | K | 1MHz, 0.1V | 1.00 | 0.25 | 19.0 |
| 330 | 33.0 | K | 1MHz, 0.1V | 1.40 | 0.20 | 17.0 |
| 470 | 47.0 | K | 1MHz, 0.1V | 2.20 | 0.17 | 13.0 |
| 680 | 68.0 | K | 1MHz, 0.1V | 3.20 | 0.13 | 9.00 |
| 101 | 100 | K | 1MHz, 0.1V | 4.50 | 0.10 | 8.00 |

03A2

| Codes | L (µH) | Tolerance | Test Condition | Quality Factor | | DCR (Ω) max. | IDC (A) max. | SRF (MHz) min. |
|-------|--------|-----------|----------------|----------------|----------------|--------------|--------------|----------------|
| | | | | Spec. min. | Test Condition | | | |
| 1R0 | 1.00 | M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 0.50 | 0.445 | 100 |
| 1R2 | 1.20 | M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 0.60 | 0.425 | 100 |
| 1R5 | 1.50 | K, M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 0.60 | 0.40 | 75.0 |
| 1R8 | 1.80 | K, M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 0.70 | 0.39 | 60.0 |
| 2R2 | 2.20 | K, M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 0.80 | 0.37 | 50.0 |
| 2R7 | 2.70 | K, M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 0.90 | 0.32 | 43.0 |
| 3R3 | 3.30 | K, M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 1.00 | 0.30 | 38.0 |
| 3R9 | 3.90 | K, M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 1.10 | 0.29 | 35.0 |
| 4R7 | 4.70 | K, M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 1.20 | 0.27 | 31.0 |
| 5R6 | 5.60 | K, M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 1.30 | 0.25 | 28.0 |
| 6R8 | 6.80 | K, M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 1.50 | 0.24 | 25.0 |
| 8R2 | 8.20 | K, M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 1.60 | 0.225 | 23.0 |
| 100 | 10.0 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 1.80 | 0.19 | 20.0 |
| 120 | 12.0 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 2.00 | 0.18 | 18.0 |
| 150 | 15.0 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 2.20 | 0.17 | 16.0 |
| 180 | 18.0 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 2.50 | 0.165 | 15.0 |
| 220 | 22.0 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 2.80 | 0.15 | 14.0 |
| 270 | 27.0 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 3.10 | 0.125 | 13.0 |
| 330 | 33.0 | J, K | 1MHz, 0.1V | 40 | 1MHz, 0.1V | 3.50 | 0.115 | 12.0 |
| 390 | 39.0 | J, K | 1MHz, 0.1V | 40 | 1MHz, 0.1V | 3.90 | 0.11 | 11.0 |
| 470 | 47.0 | J, K | 1MHz, 0.1V | 40 | 1MHz, 0.1V | 4.30 | 0.10 | 11.0 |
| 560 | 56.0 | J, K | 1MHz, 0.1V | 40 | 1MHz, 0.1V | 4.90 | 0.085 | 10.0 |
| 680 | 68.0 | J, K | 1MHz, 0.1V | 40 | 1MHz, 0.1V | 5.50 | 0.08 | 9.00 |
| 820 | 82.0 | J, K | 1MHz, 0.1V | 40 | 1MHz, 0.1V | 6.20 | 0.07 | 8.50 |
| 101 | 100 | J, K | 1MHz, 0.1V | 40 | 796KHz, 0.1V | 7.00 | 0.08 | 8.00 |
| 121 | 120 | J, K | 1MHz, 0.1V | 40 | 796KHz, 0.1V | 8.00 | 0.075 | 7.50 |
| 151 | 150 | J, K | 1MHz, 0.1V | 40 | 796KHz, 0.1V | 9.30 | 0.07 | 7.00 |
| 181 | 180 | J, K | 1MHz, 0.1V | 40 | 796KHz, 0.1V | 10.20 | 0.065 | 6.00 |
| 221 | 220 | J, K | 1MHz, 0.1V | 40 | 796KHz, 0.1V | 11.80 | 0.065 | 5.50 |
| 271 | 270 | J, K | 1MHz, 0.1V | 40 | 796KHz, 0.1V | 12.50 | 0.065 | 5.00 |
| 331 | 330 | J, K | 1MHz, 0.1V | 40 | 796KHz, 0.1V | 15.00 | 0.065 | 5.00 |
| 391 | 390 | J, K | 1MHz, 0.1V | 50 | 796KHz, 0.1V | 22.00 | 0.05 | 5.00 |
| 471 | 470 | J, K | 1KHz, 0.1V | 50 | 796KHz, 0.1V | 25.00 | 0.045 | 5.00 |
| 561 | 560 | J, K | 1KHz, 0.1V | 50 | 796KHz, 0.1V | 28.00 | 0.04 | 5.00 ref |

LMax SMD Power Inductor



LMMN Series – Miniature Style M

0403

| Codes | L (μ H) | Tolerance | Test Condition | Quality Factor | | DCR (Ω) max. | IDC (A) max. | SRF (MHz) min. |
|-------|-----------------|-----------|-------------------|----------------|----------------|--------------------------|-----------------|-------------------|
| | | | | Spec. min. | Test Condition | | | |
| 1R0 | 1.00 | M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 0.20 | 0.50 | 120 |
| 1R2 | 1.20 | M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 0.20 | 0.50 | 100 |
| 1R5 | 1.50 | M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 0.30 | 0.50 | 85.0 |
| 1R8 | 1.80 | M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 0.30 | 0.50 | 75.0 |
| 2R2 | 2.20 | M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 0.30 | 0.50 | 62.0 |
| 2R7 | 2.70 | M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 0.32 | 0.50 | 53.0 |
| 3R3 | 3.30 | M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 0.35 | 0.50 | 47.0 |
| 3R9 | 3.90 | M | 1MHz, 0.1V | 20 | 1MHz, 0.1V | 0.38 | 0.50 | 41.0 |
| 4R7 | 4.70 | K, M | 1MHz, 0.1V | 30 | 1MHz, 0.1V | 0.40 | 0.50 | 38.0 |
| 5R6 | 5.60 | K, M | 1MHz, 0.1V | 30 | 1MHz, 0.1V | 0.47 | 0.50 | 33.0 |
| 6R8 | 6.80 | K, M | 1MHz, 0.1V | 30 | 1MHz, 0.1V | 0.50 | 0.45 | 31.0 |
| 8R2 | 8.20 | K, M | 1MHz, 0.1V | 30 | 1MHz, 0.1V | 0.56 | 0.45 | 27.0 |
| 100 | 10.0 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 0.56 | 0.40 | 23.0 |
| 120 | 12.0 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 0.62 | 0.38 | 21.0 |
| 150 | 15.0 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 0.73 | 0.36 | 19.0 |
| 180 | 18.0 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 0.82 | 0.34 | 17.0 |
| 220 | 22.0 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 0.94 | 0.32 | 15.0 |
| 270 | 27.0 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 1.10 | 0.30 | 14.0 |
| 330 | 33.0 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 1.20 | 0.27 | 12.0 |
| 390 | 39.0 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 1.40 | 0.24 | 11.0 |
| 470 | 47.0 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 1.50 | 0.22 | 10.0 |
| 560 | 56.0 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 1.70 | 0.20 | 9.30 |
| 680 | 68.0 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 1.90 | 0.18 | 8.40 |
| 820 | 82.0 | J, K | 1MHz, 0.1V | 35 | 1MHz, 0.1V | 2.20 | 0.17 | 7.50 |
| 101 | 100 | J, K | 1MHz, 0.1V | 40 | 796KHz, 0.1V | 2.50 | 0.16 | 6.80 |
| 121 | 120 | J, K | 1MHz, 0.1V | 40 | 796KHz, 0.1V | 3.00 | 0.15 | 6.20 |
| 151 | 150 | J, K | 1MHz, 0.1V | 40 | 796KHz, 0.1V | 3.70 | 0.13 | 5.50 |
| 181 | 180 | J, K | 1MHz, 0.1V | 40 | 796KHz, 0.1V | 4.50 | 0.12 | 5.00 |
| 221 | 220 | J, K | 1MHz, 0.1V | 40 | 796KHz, 0.1V | 5.40 | 0.11 | 4.50 |
| 271 | 270 | J, K | 1MHz, 0.1V | 40 | 796KHz, 0.1V | 6.80 | 0.10 | 4.00 |
| 331 | 330 | J, K | 1MHz, 0.1V | 40 | 796KHz, 0.1V | 8.20 | 0.095 | 3.60 |
| 391 | 390 | J, K | 1MHz, 0.1V | 40 | 796KHz, 0.1V | 9.70 | 0.09 | 3.30 |
| 471 | 470 | J, K | 1KHz, 0.1V | 40 | 796KHz, 0.1V | 11.80 | 0.08 | 3.00 |
| 561 | 560 | J, K | 1KHz, 0.1V | 40 | 796KHz, 0.1V | 14.50 | 0.07 | 2.70 |
| 681 | 680 | J, K | 1KHz, 0.1V | 40 | 796KHz, 0.1V | 17.00 | 0.065 | 2.50 |
| 821 | 820 | J, K | 1KHz, 0.1V | 40 | 796KHz, 0.1V | 20.50 | 0.06 | 2.20 |
| 102 | 1000 | J, K | 1KHz, 0.1V | 40 | 252KHz, 0.1V | 25.00 | 0.05 | 2.00 |
| 122 | 1200 | J, K | 1KHz, 0.1V | 40 | 252KHz, 0.1V | 30.00 | 0.045 | 1.80 |
| 152 | 1500 | J, K | 1KHz, 0.1V | 40 | 252KHz, 0.1V | 37.00 | 0.04 | 1.60 |
| 182 | 1800 | J, K | 1KHz, 0.1V | 40 | 252KHz, 0.1V | 45.00 | 0.035 | 1.50 |
| 222 | 2200 | J, K | 1KHz, 0.1V | 40 | 252KHz, 0.1V | 50.00 | 0.03 | 1.30 |

LMax SMD Power Inductor



LMMN Series – Miniature Style M

0302 (C)

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) ±20% | I sat (A) max. | I rms (A) max. | SRF (MHz) min. |
|-------|--------|-----------|----------------|--------------|----------------|----------------|----------------|
| R47 | 0.47 | N | 1MHz, 0.1V | 0.03 | 3.40 | 2.55 | 100 |
| 1R0 | 1.00 | N | 1MHz, 0.1V | 0.045 | 2.30 | 2.05 | 100 |
| 1R5 | 1.50 | N | 1MHz, 0.1V | 0.057 | 1.75 | 1.75 | 70.0 |
| 2R2 | 2.20 | N | 1MHz, 0.1V | 0.076 | 1.55 | 1.60 | 70.0 |
| 3R3 | 3.30 | N | 1MHz, 0.1V | 0.12 | 1.25 | 1.20 | 50.0 |
| 4R7 | 4.70 | N | 1MHz, 0.1V | 0.18 | 1.00 | 1.00 | 40.0 |
| 6R8 | 6.80 | N | 1MHz, 0.1V | 0.24 | 0.85 | 0.85 | 40.0 |
| 100 | 10.0 | M | 1MHz, 0.1V | 0.38 | 0.75 | 0.70 | 30.0 |
| 150 | 15.0 | M | 1MHz, 0.1V | 0.57 | 0.60 | 0.52 | 20.0 |
| 220 | 22.0 | M | 1MHz, 0.1V | 0.81 | 0.50 | 0.45 | 20.0 |
| 330 | 33.0 | M | 1MHz, 0.1V | 1.15 | 0.38 | 0.39 | 13.0 |
| 470 | 47.0 | M | 1MHz, 0.1V | 1.78 | 0.33 | 0.31 | 11.0 |
| 680 | 68.0 | M | 1MHz, 0.1V | 2.28 | 0.28 | 0.275 | 11.0 |
| 101 | 100 | M | 1MHz, 0.1V | 2.70 | 0.18 | 0.25 | 8.00 |
| 121 | 120 | M | 1MHz, 0.1V | 4.38 | 0.17 | 0.20 | 8.00 |

03A2 (C)

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. | SRF (MHz) min. |
|-------|--------|-----------|----------------|--------------|--------------|----------------|
| 1R0 | 1.00 | M | 1MHz, 0.1V | 0.078 | 1.00 | 100 |
| 2R2 | 2.20 | M | 1MHz, 0.1V | 0.126 | 0.79 | 64.0 |
| 3R3 | 3.30 | M | 1MHz, 0.1V | 0.165 | 0.50 | 50.0 |
| 4R7 | 4.70 | M | 1MHz, 0.1V | 0.195 | 0.45 | 43.0 |
| 6R8 | 6.80 | M | 1MHz, 0.1V | 0.33 | 0.45 | 38.0 |
| 100 | 10.0 | M | 1MHz, 0.1V | 0.572 | 0.30 | 26.0 |
| 220 | 22.0 | K, M | 1MHz, 0.1V | 0.923 | 0.25 | 19.0 |
| 470 | 47.0 | K, M | 1MHz, 0.1V | 1.69 | 0.17 | 12.0 |
| 101 | 100 | J, K | 1MHz, 0.1V | 4.55 | 0.10 | 8.00 |
| 151 | 150 | J, K | 1MHz, 0.1V | 9.10 | 0.08 | 7.00 |
| 221 | 220 | J, K | 1MHz, 0.1V | 10.92 | 0.07 | 5.50 |
| 331 | 330 | J, K | 1MHz, 0.1V | 13.0 | 0.06 | 4.50 |
| 391 | 390 | J, K | 1MHz, 0.1V | 22.1 | 0.06 | 4.00 |
| 471 | 470 | J, K | 1MHz, 0.1V | 24.7 | 0.06 | 3.70 |
| 561 | 560 | J, K | 1MHz, 0.1V | 28.6 | 0.06 | 3.40 |

0403 (C)

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. | SRF (MHz) min. |
|-------|--------|-----------|----------------|--------------|--------------|----------------|
| 1R0 | 1.00 | M | 1MHz, 0.1V | 0.08 | 1.08 | 100 |
| 1R5 | 1.50 | M | 1MHz, 0.1V | 0.09 | 1.00 | 85.0 |
| 2R2 | 2.20 | M | 1MHz, 0.1V | 0.11 | 0.90 | 60.0 |
| 3R3 | 3.30 | M | 1MHz, 0.1V | 0.13 | 0.80 | 47.0 |
| 4R7 | 4.70 | K, M | 1MHz, 0.1V | 0.15 | 0.75 | 35.0 |
| 6R8 | 6.80 | K, M | 1MHz, 0.1V | 0.20 | 0.72 | 30.0 |
| 100 | 10.0 | J, K | 1MHz, 0.1V | 0.24 | 0.65 | 23.0 |
| 150 | 15.0 | J, K | 1MHz, 0.1V | 0.32 | 0.57 | 20.0 |
| 220 | 22.0 | J, K | 1MHz, 0.1V | 0.60 | 0.42 | 15.0 |
| 330 | 33.0 | J, K | 1MHz, 0.1V | 1.00 | 0.31 | 12.0 |
| 470 | 47.0 | J, K | 1MHz, 0.1V | 1.10 | 0.28 | 10.0 |
| 680 | 68.0 | J, K | 1MHz, 0.1V | 1.70 | 0.22 | 8.40 |
| 101 | 100 | J, K | 1MHz, 0.1V | 2.20 | 0.19 | 6.80 |
| 151 | 150 | J, K | 1MHz, 0.1V | 3.50 | 0.13 | 5.50 |
| 221 | 220 | J, K | 1MHz, 0.1V | 4.00 | 0.11 | 4.50 |
| 331 | 330 | J, K | 1MHz, 0.1V | 6.80 | 0.10 | 3.60 |
| 471 | 470 | J, K | 1kHz, 0.1V | 8.50 | 0.09 | 3.00 |

LMax SMD Power Inductor



LMMN Series – Miniature Style M

0605 (C)

| Codes | L (μ H) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. | SRF (MHz) min. |
|-------|-----------------|-----------|-------------------|--------------------------|-----------------|-------------------|
| R12 | 0.12 | M | 1MHz, 0.1V | 0.0098 | 6.00 | 450 |
| R27 | 0.27 | M | 1MHz, 0.1V | 0.014 | 5.30 | 300 |
| R47 | 0.47 | M | 1MHz, 0.1V | 0.0182 | 4.80 | 200 |
| 1R0 | 1.00 | M | 1MHz, 0.1V | 0.027 | 4.00 | 150 |
| 1R5 | 1.50 | M | 1MHz, 0.1V | 0.031 | 3.70 | 110 |
| 2R2 | 2.20 | M | 1MHz, 0.1V | 0.041 | 3.20 | 80.0 |
| 3R3 | 3.30 | M | 1MHz, 0.1V | 0.050 | 2.90 | 40.0 |
| 4R7 | 4.70 | M | 1MHz, 0.1V | 0.0574 | 2.70 | 30.0 |
| 6R8 | 6.80 | M | 1MHz, 0.1V | 0.104 | 2.00 | 25.0 |
| 100 | 10.0 | K, M | 1MHz, 0.1V | 0.130 | 1.70 | 20.0 |
| 150 | 15.0 | K, M | 1MHz, 0.1V | 0.21 | 1.40 | 17.0 |
| 220 | 22.0 | K, M | 1MHz, 0.1V | 0.266 | 1.20 | 15.0 |
| 330 | 33.0 | K, M | 1MHz, 0.1V | 0.448 | 0.90 | 12.0 |
| 470 | 47.0 | K, M | 1MHz, 0.1V | 0.56 | 0.80 | 10.0 ref |
| 680 | 68.0 | K, M | 1MHz, 0.1V | 0.938 | 0.64 | 7.60 |
| 101 | 100 | K, M | 100KHz, 0.1V | 1.204 | 0.56 | 6.50 |
| 151 | 150 | K, M | 100KHz, 0.1V | 2.66 | 0.42 | 5.00 |
| 221 | 220 | K, M | 100KHz, 0.1V | 3.36 | 0.32 | 4.00 |
| 331 | 330 | K, M | 100KHz, 0.1V | 6.16 | 0.27 | 3.10 |
| 471 | 470 | K, M | 100KHz, 0.1V | 7.56 | 0.24 | 2.40 |
| 681 | 680 | K, M | 100KHz, 0.1V | 11.34 | 0.19 | 1.90 |
| 102 | 1000 | K, M | 10KHz, 0.1V | 14.42 | 0.15 | 1.70 |
| 222 | 2200 | K, M | 10KHz, 0.1V | 30.1 | 0.10 | 1.20 |
| 472 | 4700 | K, M | 10KHz, 0.1V | 61.04 | 0.07 | 0.80 |
| 103 | 10000 | K, M | 10KHz, 0.1V | 140. | 0.05 | 0.50 |

LMax DIP Power Inductor



LMDP Series –Non Shielded Style N

FEATURES

- Density design, small size, and low cost
- Comparatively range rated current and high inductance
- Low DCR and high dip stability

APPLICATIONS

- Personal Computers
- Variety of Battery Power Equipment
- DC Power Supply Circuits

CHARACTERISTICS

- Rated DC Current: The current when the inductance becomes 10% lower than its initial value. (Ta=25°C)
- Operating temperature range -40 ~ 100°C

INDUCTANCE AND RATED CURRENT RANGES

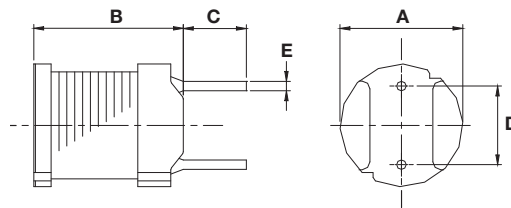
- 0605 22 ~ 1000μH 0.90 ~ 0.13A
- 0606 22 ~ 1000μH 1.27 ~ 0.19A
- 0805 10 ~ 10000μH 2.50 ~ 0.081A
- 0807 10 ~ 10000μH 2.90 ~ 0.084A
- 0809 10 ~ 47000μH 2.60 ~ 0.038A
- 1006 10 ~ 1000μH 3.60 ~ 0.36A
- 1008 10 ~ 1000μH 4.50 ~ 0.45A
- 1010 10 ~ 1000μH 5.30 ~ 0.53A
- Electrical specifications at 25°C



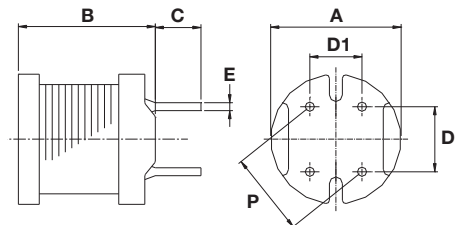
DIMENSIONS



LMDP 0605 / 0606 / 0805 / 0807 / 0809



LMDP 1006 / 1008 / 1010



mm (inches)

| Type | A | B max. | C | D | D1 | E | P |
|------|--------------------------------|-----------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| 0605 | 6.00 ± 0.50 (0.236 ± 0.020) | 5.00 (0.197) | 4.00 ± 1.00 (0.157 ± 0.039) | 4.00 ± 0.30 (0.157 ± 0.012) | - | 0.50 ± 0.10 (0.010 ± 0.004) | - |
| 0606 | 6.00 ± 0.50 (0.236 ± 0.020) | 6.50 (0.256) | 4.00 ± 1.00 (0.157 ± 0.039) | 4.00 ± 0.30 (0.157 ± 0.012) | - | 0.50 ± 0.10 (0.010 ± 0.004) | - |
| 0805 | 7.80 ± 0.50 (0.307 ± 0.020) | 5.50 (0.217) | 5.00 ± 1.00 (0.197 ± 0.039) | 5.00 ± 0.30 (0.197 ± 0.012) | - | 0.65 ± 0.10 (0.026 ± 0.004) | - |
| 0807 | 7.80 ± 0.50 (0.307 ± 0.020) | 7.50 (0.295) | 5.00 ± 1.00 (0.197 ± 0.039) | 5.00 ± 0.30 (0.197 ± 0.012) | - | 0.65 ± 0.10 (0.026 ± 0.004) | - |
| 0809 | 7.80 ± 0.50 (0.307 ± 0.020) | 9.50 (0.374) | 5.00 ± 1.00 (0.197 ± 0.039) | 5.00 ± 0.30 (0.197 ± 0.012) | - | 0.65 ± 0.10 (0.026 ± 0.004) | - |
| 1006 | 10.0 ± 0.50 (0.394 ± 0.020) | 6.50 (0.256) | 3.50 ± 1.00 (0.138 ± 0.039) | 5.00 ± 0.30 (0.197 ± 0.012) | 4.00 ± 0.30 (0.157 ± 0.012) | 0.80 ± 0.10 (0.031 ± 0.004) | 6.40 ± 0.50 (0.252 ± 0.020) |
| 1008 | 10.0 ± 0.50 (0.394 ± 0.020) | 8.50 (0.335) | 3.50 ± 1.00 (0.138 ± 0.039) | 5.00 ± 0.30 (0.197 ± 0.012) | 4.00 ± 0.30 (0.157 ± 0.012) | 0.65 ± 0.10 (0.026 ± 0.004) | 6.40 ± 0.50 (0.252 ± 0.020) |
| 1010 | 10.0 ± 0.50 (0.394 ± 0.020) | 10.5 (0.413) | 3.50 ± 1.00 (0.138 ± 0.039) | 5.00 ± 0.30 (0.197 ± 0.012) | 4.00 ± 0.30 (0.157 ± 0.012) | 0.70 ± 0.10 (0.028 ± 0.004) | 6.40 ± 0.50 (0.252 ± 0.020) |

LMax DIP Power Inductor



LMDP Series –Non Shielded Style N

HOW TO ORDER

| | | | | | | | | |
|---------------------|---------------|-----------------------------------|----------------------|------------------------------------------------------------|--------------|--------------------|----------------|------------------|
| LM | DP | 0807 | M | R04 | N | T | A | B |
| | | | | | | | | |
| Family | Series | Size | Tolerance | Inductance | Style | Termination | Special | Packaging |
| LM = Power Inductor | DP = DIP | 0807 = 8x7xh (h = see catalog) | K = ±10% M = ±20% | 100 = 10µH 101 = 100µH 102 = 1000µH 103 = 10000µH | | T = Sn Plate | A = Standard | B = Box |

ELECTRICAL CHARACTERISTICS

0605/0606/0805/0807

| Codes | L (µH) | Tolerance | Test Condition | DCR (Ω) max. | | | | I sat (A) max* | | | |
|-------|--------|-----------|----------------|--------------|------|------|------|----------------|------|-------|-------|
| | | | | 0605 | 0606 | 0805 | 0807 | 0605 | 0606 | 0805 | 0807 |
| 100 | 10 | M | 100KHz, 0.1V | – | – | 0.07 | 0.05 | – | – | 2.50 | 2.90 |
| 120 | 12 | M | 100KHz, 0.1V | – | – | 0.08 | 0.06 | – | – | 2.40 | 2.50 |
| 150 | 15 | M | 100KHz, 0.1V | – | – | 0.09 | 0.07 | – | – | 2.10 | 2.20 |
| 180 | 18 | M | 100KHz, 0.1V | – | – | 0.10 | 0.08 | – | – | 2.00 | 1.90 |
| 220 | 22 | M | 100KHz, 0.1V | 0.18 | 0.11 | 0.12 | 0.09 | 0.90 | 1.27 | 1.70 | 1.80 |
| 270 | 27 | M | 100KHz, 0.1V | 0.21 | 0.14 | 0.14 | 0.11 | 0.81 | 1.14 | 1.60 | 1.70 |
| 330 | 33 | M | 100KHz, 0.1V | 0.27 | 0.17 | 0.17 | 0.13 | 0.74 | 1.03 | 1.40 | 1.50 |
| 390 | 39 | M | 100KHz, 0.1V | 0.29 | 0.19 | 0.21 | 0.14 | 0.68 | 0.95 | 1.30 | 1.30 |
| 470 | 47 | M | 100KHz, 0.1V | 0.34 | 0.23 | 0.24 | 0.15 | 0.62 | 0.87 | 1.20 | 1.30 |
| 560 | 56 | M | 100KHz, 0.1V | 0.42 | 0.26 | 0.31 | 0.18 | 0.57 | 0.80 | 1.10 | 1.20 |
| 680 | 68 | M | 100KHz, 0.1V | 0.48 | 0.28 | 0.34 | 0.20 | 0.51 | 0.72 | 1.00 | 1.10 |
| 820 | 82 | M | 100KHz, 0.1V | 0.55 | 0.39 | 0.40 | 0.24 | 0.47 | 0.66 | 0.93 | 1.00 |
| 101 | 100 | K | 1KHz, 0.1V | 0.68 | 0.43 | 0.52 | 0.28 | 0.42 | 0.59 | 0.81 | 0.89 |
| 121 | 120 | K | 1KHz, 0.1V | 0.77 | 0.54 | 0.59 | 0.36 | 0.39 | 0.54 | 0.76 | 0.81 |
| 151 | 150 | K | 1KHz, 0.1V | 0.95 | 0.64 | 0.71 | 0.42 | 0.35 | 0.48 | 0.67 | 0.72 |
| 181 | 180 | K | 1KHz, 0.1V | 1.15 | 0.74 | 0.89 | 0.57 | 0.32 | 0.44 | 0.62 | 0.66 |
| 221 | 220 | K | 1KHz, 0.1V | 1.30 | 0.96 | 1.04 | 0.63 | 0.29 | 0.40 | 0.54 | 0.57 |
| 271 | 270 | K | 1KHz, 0.1V | 1.55 | 1.12 | 1.28 | 0.88 | 0.26 | 0.36 | 0.49 | 0.51 |
| 331 | 330 | K | 1KHz, 0.1V | 2.18 | 1.48 | 1.47 | 1.05 | 0.23 | 0.33 | 0.44 | 0.46 |
| 391 | 390 | K | 1KHz, 0.1V | 2.47 | 1.66 | 1.67 | 1.17 | 0.21 | 0.30 | 0.41 | 0.44 |
| 471 | 470 | K | 1KHz, 0.1V | 2.92 | 1.91 | 1.95 | 1.34 | 0.20 | 0.27 | 0.38 | 0.41 |
| 561 | 560 | K | 1KHz, 0.1V | 3.97 | 2.31 | 2.83 | 1.72 | 0.18 | 0.25 | 0.35 | 0.36 |
| 681 | 680 | K | 1KHz, 0.1V | 4.57 | 2.67 | 3.25 | 1.96 | 0.16 | 0.23 | 0.32 | 0.33 |
| 821 | 820 | K | 1KHz, 0.1V | 5.28 | 3.10 | 3.82 | 2.56 | 0.15 | 0.21 | 0.31 | 0.30 |
| 102 | 1000 | K | 1KHz, 0.1V | 7.06 | 4.45 | 5.28 | 2.94 | 0.13 | 0.19 | 0.25 | 0.27 |
| 122 | 1200 | K | 1KHz, 0.1V | – | – | 6.03 | 4.04 | – | – | 0.23 | 0.24 |
| 152 | 1500 | K | 1KHz, 0.1V | – | – | 7.15 | 4.70 | – | – | 0.21 | 0.22 |
| 182 | 1800 | K | 1KHz, 0.1V | – | – | 8.26 | 5.05 | – | – | 0.20 | 0.20 |
| 222 | 2200 | K | 1KHz, 0.1V | – | – | 11.1 | 6.25 | – | – | 0.18 | 0.18 |
| 272 | 2700 | K | 1KHz, 0.1V | – | – | 13.1 | 8.72 | – | – | 0.16 | 0.16 |
| 332 | 3300 | K | 1KHz, 0.1V | – | – | 15.9 | 10.6 | – | – | 0.14 | 0.15 |
| 392 | 3900 | K | 1KHz, 0.1V | – | – | 18.0 | 14.2 | – | – | 0.13 | 0.14 |
| 472 | 4700 | K | 1KHz, 0.1V | – | – | 23.9 | 16.7 | – | – | 0.12 | 0.12 |
| 562 | 5600 | K | 1KHz, 0.1V | – | – | 26.8 | 18.7 | – | – | 0.11 | 0.11 |
| 682 | 6800 | K | 1KHz, 0.1V | – | – | 31.7 | 21.8 | – | – | 0.098 | 0.10 |
| 822 | 8200 | K | 1KHz, 0.1V | – | – | 46.5 | 28.7 | – | – | 0.088 | 0.093 |
| 103 | 10000 | K | 1KHz, 0.1V | – | – | 55.7 | 33.0 | – | – | 0.081 | 0.084 |

*Saturation Current: The current when the inductance becomes 10% lower than its initial value. (Ta=25°C)

LMax DIP Power Inductor



LMDP Series –Non Shielded Style N

0809/1006/1008/1010

| Codes | L (μ H) | Tolerance | Test Condition | DCR (Ω) max. | | | | I sat (A) max* | | | |
|-------|-----------------|-----------|-------------------|-----------------------|-------|-------|-------|----------------|------|------|------|
| | | | | 0809 | 1006 | 1008 | 1010 | 0809 | 1006 | 1008 | 1010 |
| 100 | 10 | M | 100KHz, 0.1V | 0.04 | 0.040 | 0.027 | 0.022 | 2.60 | 3.60 | 4.50 | 5.30 |
| 120 | 12 | M | 100KHz, 0.1V | 0.04 | 0.044 | 0.031 | 0.023 | 2.60 | 3.30 | 4.10 | 4.90 |
| 150 | 15 | M | 100KHz, 0.1V | 0.05 | 0.058 | 0.036 | 0.026 | 2.10 | 2.90 | 3.70 | 4.40 |
| 180 | 18 | M | 100KHz, 0.1V | 0.05 | 0.064 | 0.049 | 0.033 | 2.00 | 2.70 | 3.40 | 4.00 |
| 220 | 22 | M | 100KHz, 0.1V | 0.06 | 0.088 | 0.055 | 0.037 | 1.70 | 2.40 | 3.10 | 3.60 |
| 270 | 27 | M | 100KHz, 0.1V | 0.06 | 0.100 | 0.062 | 0.048 | 1.60 | 2.20 | 2.80 | 3.30 |
| 330 | 33 | M | 100KHz, 0.1V | 0.07 | 0.110 | 0.078 | 0.055 | 1.40 | 2.00 | 2.50 | 2.90 |
| 390 | 39 | M | 100KHz, 0.1V | 0.08 | 0.140 | 0.087 | 0.073 | 1.40 | 1.80 | 2.30 | 2.70 |
| 470 | 47 | M | 100KHz, 0.1V | 0.10 | 0.160 | 0.099 | 0.083 | 1.30 | 1.70 | 2.10 | 2.50 |
| 560 | 56 | M | 100KHz, 0.1V | 0.11 | 0.190 | 0.130 | 0.092 | 1.20 | 1.50 | 1.90 | 2.30 |
| 680 | 68 | M | 100KHz, 0.1V | 0.14 | 0.220 | 0.140 | 0.120 | 1.10 | 1.40 | 1.70 | 2.10 |
| 820 | 82 | M | 100KHz, 0.1V | 0.16 | 0.290 | 0.160 | 0.140 | 1.00 | 1.30 | 1.60 | 1.90 |
| 101 | 100 | K | 1KHz, 0.1V | 0.19 | 0.320 | 0.210 | 0.160 | 0.90 | 1.30 | 1.40 | 1.70 |
| 121 | 120 | K | 1KHz, 0.1V | 0.22 | 0.380 | 0.240 | 0.200 | 0.82 | 1.20 | 1.30 | 1.50 |
| 151 | 150 | K | 1KHz, 0.1V | 0.27 | 0.500 | 0.320 | 0.230 | 0.74 | 1.00 | 1.20 | 1.40 |
| 181 | 180 | K | 1KHz, 0.1V | 0.31 | 0.560 | 0.350 | 0.310 | 0.71 | 0.84 | 1.10 | 1.30 |
| 221 | 220 | K | 1KHz, 0.1V | 0.38 | 0.780 | 0.450 | 0.340 | 0.64 | 0.76 | 0.96 | 1.10 |
| 271 | 270 | K | 1KHz, 0.1V | 0.53 | 0.920 | 0.610 | 0.400 | 0.57 | 0.69 | 0.87 | 1.00 |
| 331 | 330 | K | 1KHz, 0.1V | 0.61 | 1.100 | 0.690 | 0.520 | 0.51 | 0.62 | 0.79 | 0.93 |
| 391 | 390 | K | 1KHz, 0.1V | 0.69 | 1.300 | 0.780 | 0.650 | 0.48 | 0.57 | 0.72 | 0.86 |
| 471 | 470 | K | 1KHz, 0.1V | 0.89 | 1.500 | 1.000 | 0.710 | 0.43 | 0.52 | 0.66 | 0.78 |
| 561 | 560 | K | 1KHz, 0.1V | 1.01 | 1.900 | 1.200 | 1.000 | 0.40 | 0.48 | 0.60 | 0.71 |
| 681 | 680 | K | 1KHz, 0.1V | 1.18 | 2.200 | 1.400 | 1.100 | 0.35 | 0.43 | 0.55 | 0.65 |
| 821 | 820 | K | 1KHz, 0.1V | 1.57 | 2.600 | 1.800 | 1.300 | 0.32 | 0.40 | 0.50 | 0.59 |
| 102 | 1000 | K | 1KHz, 0.1V | 1.84 | 3.200 | 2.100 | 1.700 | 0.30 | 0.36 | 0.45 | 0.53 |
| 122 | 1200 | K | 1KHz, 0.1V | 2.10 | - | - | - | 0.27 | - | - | - |
| 152 | 1500 | K | 1KHz, 0.1V | 2.80 | - | - | - | 0.23 | - | - | - |
| 182 | 1800 | K | 1KHz, 0.1V | 3.21 | - | - | - | 0.21 | - | - | - |
| 222 | 2200 | K | 1KHz, 0.1V | 4.21 | - | - | - | 0.19 | - | - | - |
| 272 | 2700 | K | 1KHz, 0.1V | 4.94 | - | - | - | 0.17 | - | - | - |
| 332 | 3300 | K | 1KHz, 0.1V | 6.16 | - | - | - | 0.15 | - | - | - |
| 392 | 3900 | K | 1KHz, 0.1V | 6.84 | - | - | - | 0.14 | - | - | - |
| 472 | 4700 | K | 1KHz, 0.1V | 7.89 | - | - | - | 0.13 | - | - | - |
| 562 | 5600 | K | 1KHz, 0.1V | 11.50 | - | - | - | 0.12 | - | - | - |
| 682 | 6800 | K | 1KHz, 0.1V | 13.20 | - | - | - | 0.11 | - | - | - |
| 822 | 8200 | K | 1KHz, 0.1V | 15.20 | - | - | - | 0.10 | - | - | - |
| 103 | 10000 | K | 1KHz, 0.1V | 22.00 | - | - | - | 0.089 | - | - | - |
| 123 | 12000 | K | 1KHz, 0.1V | 25.00 | - | - | - | 0.073 | - | - | - |
| 153 | 15000 | K | 1KHz, 0.1V | 29.10 | - | - | - | 0.068 | - | - | - |
| 183 | 18000 | K | 1KHz, 0.1V | 38.90 | - | - | - | 0.066 | - | - | - |
| 223 | 22000 | K | 1KHz, 0.1V | 44.90 | - | - | - | 0.059 | - | - | - |
| 273 | 27000 | K | 1KHz, 0.1V | 55.70 | - | - | - | 0.052 | - | - | - |
| 333 | 33000 | K | 1KHz, 0.1V | 64.20 | - | - | - | 0.048 | - | - | - |
| 393 | 39000 | K | 1KHz, 0.1V | 74.20 | - | - | - | 0.042 | - | - | - |
| 473 | 47000 | K | 1KHz, 0.1V | 96.40 | - | - | - | 0.038 | - | - | - |

*Saturation Current: The current when the inductance becomes 10% lower than its initial value. (Ta=25°C)

LMax DIP Power Inductor



LMDP Series –Shielded Style P

FEATURES

- Density design, small size, and low cost
- Comparatively range rated current and high inductance
- Low DCR and high dip stability

APPLICATIONS

- Personal Computers
- Variety of Battery Power Equipment
- DC Power Supply Circuits

CHARACTERISTICS

- Rated DC Current: The current when the inductance becomes 10% lower than its initial value. (Ta=25°C)
- Operating temperature range -40 ~ 100°C

INDUCTANCE AND RATED CURRENT RANGES

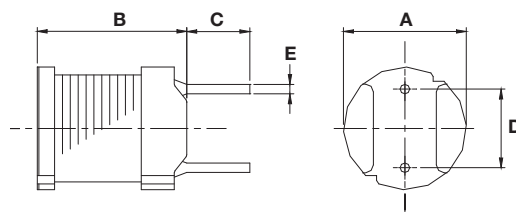
- 0606 22 ~ 1000μH 0.96 ~ 0.14A
- 0807 22 ~ 10000μH 1.60 ~ 0.074A
- 1008 10 ~ 1000μH 2.80 ~ 0.28A
- 1010 10 ~ 1000μH 3.51 ~ 0.35A
- Electrical specifications at 25°C



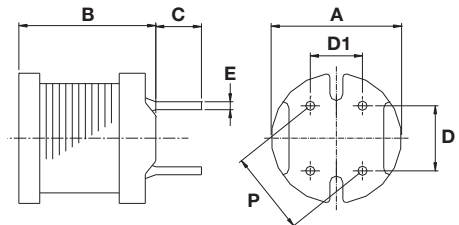
DIMENSIONS



LMDP 0606 / 0807



LMDP 1008 / 1010



mm (inches)

| Type | A | B max. | C | D | D1 | E | P |
|------|--------------------------------|-----------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| 0606 | 6.00 ± 0.50 (0.236 ± 0.020) | 6.50 (0.256) | 4.00 ± 1.00 (0.157 ± 0.039) | 4.00 ± 0.30 (0.157 ± 0.012) | - | 0.50 ± 0.10 (0.010 ± 0.004) | - |
| 0807 | 7.80 ± 0.50 (0.307 ± 0.020) | 7.50 (0.295) | 5.00 ± 1.00 (0.197 ± 0.039) | 5.00 ± 0.30 (0.197 ± 0.012) | - | 0.65 ± 0.10 (0.026 ± 0.004) | - |
| 1008 | 10.0 ± 0.50 (0.394 ± 0.020) | 8.50 (0.335) | 3.50 ± 1.00 (0.138 ± 0.039) | 5.00 ± 0.30 (0.197 ± 0.012) | 4.00 ± 0.30 (0.157 ± 0.012) | 0.65 ± 0.10 (0.026 ± 0.004) | 6.40 ± 0.50 (0.252 ± 0.020) |
| 1010 | 10.0 ± 0.5 (0.394 ± 0.020) | 10.5 (0.413) | 3.5 ± 1.0 (0.138 ± 0.039) | 5.0 ± 0.3 (0.197 ± 0.012) | 4.0 ± 0.3 (0.157 ± 0.012) | 0.70 ± 0.1 (0.028 ± 0.004) | 6.40 ± 0.5 (0.252 ± 0.020) |

HOW TO ORDER

LM

Family

LM = Power Inductor

DP

Series

DP = DIP

0606

Size

0606 = 6x6xh
0807 = 8x7xh
1008 = 10x8xh
1010 = 10x10xh
(h = see catalog)

M

Tolerance

K = ±10%
M = ±20%

101

Inductance

100 = 10μH
101 = 100μH
102 = 1000μH
103 = 10000μH

P

Style

T

Termination

T = Sn Plate

A

Special

A = Standard

B

Packaging

B = Box

LMax DIP Power Inductor



LMDP Series –Shielded Style P

ELECTRICAL CHARACTERISTICS

0606/0807/1008/1010

| Codes | L (μ H) | Tolerance | Test Condition | DCR (Ω) max. | | | | I sat (A) max* | | | |
|-------|-----------------|-----------|-------------------|-----------------------|-------|------|-------|----------------|-------|------|------|
| | | | | 0606 | 0807 | 1008 | 1010 | 0606 | 0807 | 1008 | 1010 |
| 100 | 10 | M | 100KHz, 0.1V | – | – | 0.05 | 0.023 | – | – | 2.80 | 3.51 |
| 120 | 12 | M | 100KHz, 0.1V | – | – | 0.06 | 0.024 | – | – | 2.50 | 3.24 |
| 150 | 15 | M | 100KHz, 0.1V | – | – | 0.07 | 0.036 | – | – | 2.30 | 2.88 |
| 180 | 18 | M | 100KHz, 0.1V | – | – | 0.08 | 0.039 | – | – | 2.10 | 2.61 |
| 220 | 22 | M | 100KHz, 0.1V | 0.13 | 0.08 | 0.09 | 0.042 | 0.96 | 1.60 | 2.00 | 2.34 |
| 270 | 27 | M | 100KHz, 0.1V | 0.18 | 0.10 | 0.10 | 0.045 | 0.87 | 1.40 | 1.76 | 2.16 |
| 330 | 33 | M | 100KHz, 0.1V | 0.21 | 0.14 | 0.11 | 0.057 | 0.78 | 1.30 | 1.60 | 1.89 |
| 390 | 39 | M | 100KHz, 0.1V | 0.26 | 0.15 | 0.12 | 0.076 | 0.72 | 1.20 | 1.38 | 1.80 |
| 470 | 47 | M | 100KHz, 0.1V | 0.29 | 0.17 | 0.14 | 0.100 | 0.66 | 1.10 | 1.28 | 1.62 |
| 560 | 56 | M | 100KHz, 0.1V | 0.33 | 0.19 | 0.15 | 0.110 | 0.60 | 0.99 | 1.20 | 1.44 |
| 680 | 68 | M | 100KHz, 0.1V | 0.36 | 0.21 | 0.16 | 0.150 | 0.55 | 0.89 | 1.00 | 1.35 |
| 820 | 82 | M | 100KHz, 0.1V | 0.39 | 0.27 | 0.18 | 0.160 | 0.50 | 0.81 | 0.96 | 1.26 |
| 101 | 100 | K | 1KHz, 0.1V | 0.54 | 0.32 | 0.20 | 0.190 | 0.45 | 0.74 | 0.92 | 1.08 |
| 121 | 120 | K | 1KHz, 0.1V | 0.62 | 0.36 | 0.24 | 0.210 | 0.41 | 0.67 | 0.80 | 0.99 |
| 151 | 150 | K | 1KHz, 0.1V | 0.72 | 0.51 | 0.35 | 0.230 | 0.37 | 0.60 | 0.73 | 0.90 |
| 181 | 180 | K | 1KHz, 0.1V | 0.88 | 0.57 | 0.40 | 0.260 | 0.34 | 0.55 | 0.64 | 0.82 |
| 221 | 220 | K | 1KHz, 0.1V | 0.99 | 0.76 | 0.54 | 0.290 | 0.30 | 0.50 | 0.61 | 0.74 |
| 271 | 270 | K | 1KHz, 0.1V | 1.52 | 0.86 | 0.76 | 0.360 | 0.27 | 0.45 | 0.56 | 0.67 |
| 331 | 330 | K | 1KHz, 0.1V | 1.69 | 0.97 | 0.86 | 0.510 | 0.25 | 0.41 | 0.50 | 0.61 |
| 391 | 390 | K | 1KHz, 0.1V | 1.85 | 1.28 | 0.93 | 0.690 | 0.23 | 0.37 | 0.44 | 0.55 |
| 471 | 470 | K | 1KHz, 0.1V | 2.85 | 1.44 | 1.23 | 0.980 | 0.21 | 0.34 | 0.41 | 0.51 |
| 561 | 560 | K | 1KHz, 0.1V | 3.21 | 1.61 | 1.34 | 1.100 | 0.19 | 0.31 | 0.38 | 0.46 |
| 681 | 680 | K | 1KHz, 0.1V | 3.60 | 2.07 | 1.53 | 1.200 | 0.17 | 0.28 | 0.34 | 0.42 |
| 821 | 820 | K | 1KHz, 0.1V | 4.87 | 2.33 | 2.10 | 1.300 | 0.16 | 0.26 | 0.32 | 0.38 |
| 102 | 1000 | K | 1KHz, 0.1V | 5.56 | 2.72 | 2.30 | 1.500 | 0.14 | 0.23 | 0.28 | 0.35 |
| 122 | 1200 | K | 1KHz, 0.1V | – | 3.98 | – | – | – | 0.21 | – | – |
| 152 | 1500 | K | 1KHz, 0.1V | – | 4.50 | – | – | – | 0.19 | – | – |
| 182 | 1800 | K | 1KHz, 0.1V | – | 6.81 | – | – | – | 0.17 | – | – |
| 222 | 2200 | K | 1KHz, 0.1V | – | 7.56 | – | – | – | 0.16 | – | – |
| 272 | 2700 | K | 1KHz, 0.1V | – | 8.54 | – | – | – | 0.14 | – | – |
| 332 | 3300 | K | 1KHz, 0.1V | – | 9.74 | – | – | – | 0.13 | – | – |
| 392 | 3900 | K | 1KHz, 0.1V | – | 12.90 | – | – | – | 0.12 | – | – |
| 472 | 4700 | K | 1KHz, 0.1V | – | 14.70 | – | – | – | 0.11 | – | – |
| 562 | 5600 | K | 1KHz, 0.1V | – | 20.40 | – | – | – | 0.099 | – | – |
| 682 | 6800 | K | 1KHz, 0.1V | – | 23.00 | – | – | – | 0.089 | – | – |
| 822 | 8200 | K | 1KHz, 0.1V | – | 30.60 | – | – | – | 0.081 | – | – |
| 103 | 10000 | K | 1KHz, 0.1V | – | 35.00 | – | – | – | 0.074 | – | – |

*Saturation Current: The current when the inductance becomes 10% lower than its initial value. (Ta=25°C)

LMax DIP Power Inductor



LMDP Series –Shielded Style S

FEATURES

- Ultra low cost
- Shielded construction
- High current rating up DC 40A
- High frequency range up to 500KHz
- Very low DC resistance
- Low noise

APPLICATIONS

- Motherboards For Laptop And Desktop Computers
- DC/DC Converter

CHARACTERISTICS

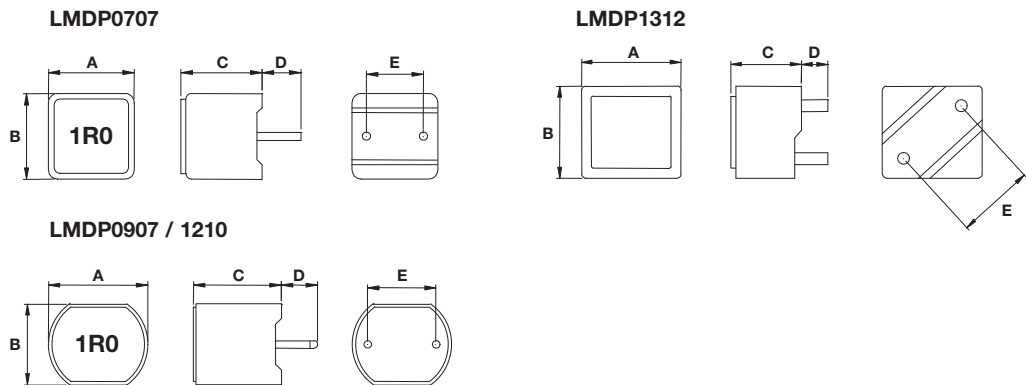
- Saturation Rated Current (IDC/Isat) : The DC current when the inductance becomes 20% Typical its initial value. (Ta=25°C)
- Temperature Rise Current (Irms): The actual current when temperature of coil becomes Δ40°C (Ta=25°C)
- Operating Temperature Range: -25°C ~ 125°C

INDUCTANCE AND RATED CURRENT RANGES

- 0707 0.56 ~ 4.7μH 32A ~ 12A
- 0907 0.56 ~ 4.7μH 32A ~ 12A
- 1210 0.22 ~ 4.7μH 56A ~ 15A
- 1312 0.33 ~ 2.2μH 55A ~ 25A
- 1815 10.0 ~ 33μH 11A ~ 6A
- Electrical specifications at 25°C



DIMENSIONS



| Type | A | B | C max. | D | E | F |
|------|--------------------------------|--------------------------------|-----------------|--------------------------------|--------------------------------|---|
| 0707 | 7.50 ± 0.50 (0.295 ± 0.020) | 7.50 ± 0.50 (0.295 ± 0.020) | 8.50 (0.335) | 3.40 ± 0.50 (0.134 ± 0.020) | 5.00 ± 0.40 (0.197 ± 0.016) | - |
| 0907 | 8.70 ± 0.50 (0.343 ± 0.020) | 7.20 ± 0.50 (0.283 ± 0.020) | 8.50 (0.335) | 3.40 ± 0.50 (0.134 ± 0.020) | 6.00 ± 0.50 (0.236 ± 0.020) | - |
| 1210 | 12.3 ± 0.50 (0.484 ± 0.020) | 10.2 ± 0.50 (0.402 ± 0.020) | 10.0 (0.394) | 3.40 ± 0.50 (0.134 ± 0.020) | 8.00 ± 0.50 (0.315 ± 0.020) | - |
| 1312 | 13.0 ± 0.50 (0.512 ± 0.020) | 12.0 ± 0.50 (0.472 ± 0.020) | 10.0 (0.394) | 3.40 ± 0.50 (0.134 ± 0.020) | 10.0 ± 0.50 (0.394 ± 0.020) | - |

mm (inches)



LMax DIP Power Inductor



LMDP Series –Shielded Style S

HOW TO ORDER

| | | | | | | | | |
|---------------------|---------------|---------------------------------------------------------------------------------------------------------|------------------|----------------------------------------------|--------------|--------------------|----------------|------------------|
| LM | DP | 0707 | M | 101 | S | T | A | B |
| | | | | | | | | |
| Family | Series | Size | Tolerance | Inductance | Style | Termination | Special | Packaging |
| LM = Power Inductor | DP = DIP | 0707 = 7x7xh 0907 = 9x7xh 1210 = 12x10xh 1312 = 13x12xh 1815 = 18x15xh (h = see catalog) | M = ±20% | R56 = 0.56µH 2R2 = 2.20µH 100 = 10.0µH | | T = Sn Plate | A = Standard | B = Box |

ELECTRICAL CHARACTERISTICS

0707

| Codes | L (µH) | Tolerance | Test Condition | DCR (Ω) max. | I sat (A) max* |
|-------|--------|-----------|----------------|--------------|----------------|
| R56 | 0.56 | M | 100KHz, 0.1V | 2.50 | 32 |
| 1R0 | 1.0 | M | 100KHz, 0.1V | 5.60 | 21 |
| 1R5 | 1.5 | M | 100KHz, 0.1V | 7.50 | 18 |
| 2R2 | 2.2 | M | 100KHz, 0.1V | 10.0 | 16 |
| 2R8 | 2.8 | M | 100KHz, 0.1V | 11.8 | 15 |
| 3R3 | 3.3 | M | 100KHz, 0.1V | 13.6 | 14 |
| 4R7 | 4.7 | M | 100KHz, 0.1V | 17.0 | 12 |

0907

| Codes | L (µH) | Tolerance | Test Condition | DCR (Ω) max. | I sat (A) max* |
|-------|--------|-----------|----------------|--------------|----------------|
| R56 | 0.56 | M | 100KHz, 0.1V | 2.50 | 32 |
| 1R0 | 1.0 | M | 100KHz, 0.1V | 5.60 | 21 |
| 1R5 | 1.5 | M | 100KHz, 0.1V | 7.50 | 18 |
| 2R2 | 2.2 | M | 100KHz, 0.1V | 10.0 | 16 |
| 2R8 | 2.8 | M | 100KHz, 0.1V | 11.8 | 15 |
| 3R3 | 3.3 | M | 100KHz, 0.1V | 13.6 | 14 |
| 4R7 | 4.7 | M | 100KHz, 0.1V | 17.0 | 12 |

1210

| Codes | L (µH) | Tolerance | Test Condition | DCR (Ω) max. | I sat (A) max* |
|-------|--------|-----------|----------------|--------------|----------------|
| R22 | 0.22 | M | 100KHz, 0.1V | 0.60 | 56 |
| R33 | 0.33 | M | 100KHz, 0.1V | 0.80 | 48 |
| R36 | 0.36 | M | 100KHz, 0.1V | 0.80 | 45 |
| R39 | 0.39 | M | 100KHz, 0.1V | 0.80 | 45 |
| R47 | 0.47 | M | 100KHz, 0.1V | 1.00 | 40 |
| R56 | 0.56 | M | 100KHz, 0.1V | 1.00 | 40 |
| R60 | 0.60 | M | 100KHz, 0.1V | 1.00 | 40 |
| R68 | 0.68 | M | 100KHz, 0.1V | 1.00 | 40 |
| R80 | 0.80 | M | 100KHz, 0.1V | 1.25 | 36 |
| 1R0 | 1.0 | M | 100KHz, 0.1V | 2.00 | 32 |
| 1R5 | 1.5 | M | 100KHz, 0.1V | 3.50 | 30 |
| 2R2 | 2.2 | M | 100KHz, 0.1V | 5.00 | 24 |
| 2R8 | 2.8 | M | 100KHz, 0.1V | 6.40 | 20 |
| 3R3 | 3.3 | M | 100KHz, 0.1V | 7.70 | 16 |
| 4R7 | 4.7 | M | 100KHz, 0.1V | 10.0 | 15 |

*Saturation Current: The DC current when the inductance becomes 20% lower than its initial value. (Ta=25°C)

LMax DIP Power Inductor



LMDP Series –Shielded Style S

1312

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | I sat (A) max* |
|-------|--------|-----------|----------------|--------------|----------------|
| R33 | 0.33 | M | 100KHz, 0.1V | 0.65 | 55 |
| R39 | 0.39 | M | 100KHz, 0.1V | 0.65 | 55 |
| R47 | 0.47 | M | 100KHz, 0.1V | 0.80 | 54 |
| R56 | 0.56 | M | 100KHz, 0.1V | 0.80 | 52 |
| R60 | 0.60 | M | 100KHz, 0.1V | 0.80 | 52 |
| R68 | 0.68 | M | 100KHz, 0.1V | 0.80 | 50 |
| R80 | 0.80 | M | 100KHz, 0.1V | 0.85 | 48 |
| 1R0 | 1.00 | M | 100KHz, 0.1V | 1.35 | 40 |
| 1R5 | 1.50 | M | 100KHz, 0.1V | 1.70 | 38 |
| 2R2 | 2.20 | M | 100KHz, 0.1V | 3.30 | 25 |

*Saturation Current: The DC current when the inductance becomes 20% lower than its initial value. (Ta=25°C)



LMax Low Profile Power Inductor



LMLP Series – Style C

FEATURES

- Small and low profile inductor
- It corresponds to high current
- Simple and original magnetic shield structure

APPLICATIONS

- For small DC/DC converter (cellular phone, HDD, DVC, DSC, PDA, LCD display etc.)

CHARACTERISTICS

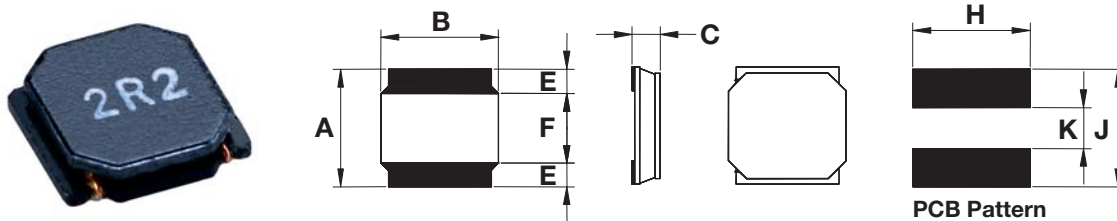
- Rated DC Current: The current when the inductance becomes 30% lower than its initial value.
- Operating temperature range: -40°C ~ +85°C

INDUCTANCE AND RATED CURRENT RANGES

| | | |
|--------|---------------|----------------|
| • 0202 | 2.2 ~ 22μH | 1.290 ~ 0.390A |
| • 0303 | 1.0 ~ 47μH | 1.30 ~ 0.220A |
| • 03A3 | 1.0 ~ 47μH | 1.50 ~ 0.250A |
| • 03B3 | 1.0 ~ 47μH | 2.10 ~ 0.320A |
| • 0404 | 1.0 ~ 47μH | 1.80 ~ 0.240A |
| • 04A4 | 1.0 ~ 47μH | 2.50 ~ 0.350A |
| • 04B4 | 1.0 ~ 220μH | 4.0 ~ 0.270A |
| • 0505 | 10μH | 1.00A |
| • 05B5 | 1.50 ~ 22.0μH | 3.35 ~ 0.90A |
| • 05D5 | 1.50 ~ 47.0μH | 6.00 ~ 1.10A |
| • 0606 | 4.7 ~ 10.0μH | 1.40 ~ 1.00A |
| • 06A6 | 2.50 ~ 100μH | 2.10 ~ 0.35A |
| • 06B6 | 0.80 ~ 22.0μH | 5.50 ~ 1.05A |
| • 06C6 | 1.50 ~ 100μH | 5.00 ~ 0.62A |
| • 06D6 | 1.30 ~ 100μH | 8.00 ~ 0.80A |
| • 0808 | 0.90 ~ 100μH | 11.0 ~ 1.00A |



DIMENSIONS



| Type | A | B | C max | D | E | F | G | H |
|------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|-----------------|-----------------|-----------------|
| 0202 | 2.40 ± 0.10 (0.095 ± 0.004) | 2.40 ± 0.10 (0.095 ± 0.004) | 1.00 (0.039) | 1.45 ± 0.20 (0.057 ± 0.008) | 0.60 ± 0.20 (0.240 ± 0.008) | 1.45 (0.057) | 2.00 (0.079) | 0.70 (0.028) |
| 0303 | 3.00 ± 0.20 (0.118 ± 0.008) | 3.00 ± 0.20 (0.118 ± 0.008) | 1.00 (0.039) | 1.90 ± 0.20 (0.075 ± 0.008) | 0.90 ± 0.20 (0.035 ± 0.008) | 2.20 (0.087) | 2.70 (0.106) | 0.80 (0.032) |
| 03A3 | 3.00 ± 0.20 (0.118 ± 0.008) | 3.00 ± 0.20 (0.118 ± 0.008) | 1.20 (0.047) | 1.90 ± 0.20 (0.075 ± 0.008) | 0.90 ± 0.20 (0.035 ± 0.008) | 2.20 (0.087) | 2.70 (0.106) | 0.80 (0.032) |
| 03B3 | 3.00 ± 0.20 (0.118 ± 0.008) | 3.00 ± 0.20 (0.118 ± 0.008) | 1.50 (0.059) | 1.90 ± 0.20 (0.075 ± 0.008) | 0.90 ± 0.20 (0.035 ± 0.008) | 2.20 (0.087) | 2.70 (0.106) | 0.80 (0.032) |
| 0404 | 4.00 ± 0.20 (0.157 ± 0.008) | 4.00 ± 0.20 (0.157 ± 0.008) | 1.00 (0.039) | 2.50 ± 0.20 (0.099 ± 0.008) | 1.10 ± 0.20 (0.043 ± 0.008) | 2.80 (0.110) | 3.70 (0.146) | 1.20 (0.047) |
| 04A4 | 4.00 ± 0.20 (0.157 ± 0.008) | 4.00 ± 0.20 (0.157 ± 0.008) | 1.20 (0.047) | 2.50 ± 0.20 (0.099 ± 0.008) | 1.10 ± 0.20 (0.043 ± 0.008) | 2.80 (0.110) | 3.70 (0.146) | 1.20 (0.047) |
| 04B4 | 4.00 ± 0.20 (0.157 ± 0.008) | 4.00 ± 0.20 (0.157 ± 0.008) | 1.80 (0.071) | 2.50 ± 0.20 (0.099 ± 0.008) | 1.10 ± 0.20 (0.043 ± 0.008) | 2.80 (0.110) | 3.70 (0.146) | 1.20 (0.047) |
| 0505 | 5.00 ± 0.20 (0.197 ± 0.008) | 5.00 ± 0.20 (0.197 ± 0.008) | 1.00 (0.039) | 3.50 ± 0.20 (0.138 ± 0.008) | 1.50 ± 0.20 (0.059 ± 0.008) | 3.80 (0.150) | 4.70 (0.185) | 1.60 (0.063) |
| 05B5 | 5.00 ± 0.20 (0.197 ± 0.008) | 5.00 ± 0.20 (0.197 ± 0.008) | 2.00 (0.078) | 3.50 ± 0.20 (0.138 ± 0.008) | 1.50 ± 0.20 (0.059 ± 0.008) | 3.80 (0.150) | 4.70 (0.185) | 1.60 (0.063) |
| 05D5 | 5.00 ± 0.20 (0.197 ± 0.008) | 5.00 ± 0.20 (0.197 ± 0.008) | 4.00 (0.157) | 3.50 ± 0.20 (0.138 ± 0.008) | 1.50 ± 0.20 (0.059 ± 0.008) | 3.80 (0.150) | 4.70 (0.185) | 1.60 (0.063) |
| 0606 | 6.00 ± 0.20 (0.236 ± 0.008) | 6.00 ± 0.20 (0.236 ± 0.008) | 1.00 ± 0.10 (0.039 ± 0.004) | 4.00 ± 0.20 (0.157 ± 0.008) | 1.35 ± 0.20 (0.053 ± 0.008) | 4.70 (0.185) | 5.70 (0.224) | 1.60 (0.063) |
| 06A6 | 6.00 ± 0.20 (0.236 ± 0.008) | 6.00 ± 0.20 (0.236 ± 0.008) | 1.20 (0.047) | 4.00 ± 0.20 (0.157 ± 0.008) | 1.35 ± 0.20 (0.053 ± 0.008) | 4.70 (0.185) | 5.70 (0.224) | 1.60 (0.063) |
| 06B6 | 6.00 ± 0.20 (0.236 ± 0.008) | 6.00 ± 0.20 (0.236 ± 0.008) | 2.00 (0.078) | 4.00 ± 0.20 (0.157 ± 0.008) | 1.35 ± 0.20 (0.053 ± 0.008) | 4.70 (0.185) | 5.70 (0.224) | 1.60 (0.063) |
| 06C6 | 6.00 ± 0.20 (0.236 ± 0.008) | 6.00 ± 0.20 (0.236 ± 0.008) | 2.80 (0.110) | 4.00 ± 0.20 (0.157 ± 0.008) | 1.35 ± 0.20 (0.053 ± 0.008) | 4.70 (0.185) | 5.70 (0.224) | 1.60 (0.063) |
| 06D6 | 6.00 ± 0.20 (0.236 ± 0.008) | 6.00 ± 0.20 (0.236 ± 0.008) | 4.50 (0.177) | 4.00 ± 0.20 (0.157 ± 0.008) | 1.35 ± 0.20 (0.053 ± 0.008) | 4.70 (0.185) | 5.70 (0.224) | 1.60 (0.063) |
| 0808 | 8.00 ± 0.20 (0.315 ± 0.008) | 8.00 ± 0.20 (0.315 ± 0.008) | 4.20 (0.165) | 5.60 ± 0.30 (0.220 ± 0.011) | 1.60 ± 0.30 (0.063 ± 0.011) | 5.60 (0.220) | 7.50 (0.188) | 1.80 (0.071) |



LMax Low Profile Power Inductor



LMLP Series – Style C

HOW TO ORDER

| | | | | | | | | |
|--------------------------|--------------------------|------------------------------------------------------|-------------------------|------------------------------------------------------------------|-------------------------|-------------------------|-------------------------|-----------------------------|
| LM ┆ ┆ ┆ | LP ┆ ┆ ┆ | 0303 ┆ ┆ ┆ | M ┆ ┆ ┆ | R04 ┆ ┆ ┆ | C ┆ ┆ ┆ | T ┆ ┆ ┆ | A ┆ ┆ ┆ | S ┆ ┆ ┆ |
| Family | Series | Size | Tolerance | Inductance | Style | Termination | Special | Packaging |
| LM = Power Inductor | LP = Low Profile | 0303 = 3x3xh 03A3 = 3x3xA(h) (h = see catalog) | M = 20% N = 30% | R39 = 0.390μH 3R9 = 3.900μH 390 = 39.00μH 391 = 390.0μH | | T = Sn Plate | A = Standard | R = 7" Reel S = 13" Reel |

ELECTRICAL CHARACTERISTICS

0202

| Code | Inductance L(μH) At 100KHz, 1.0V | Tolerance | Rated Current (A) | | DC Resistance (Ω) ±20% |
|------|----------------------------------------|-----------|----------------------------|----------------------------------|------------------------------|
| | | | Saturation Current Idc1 | Temperature Rise Current Idc2 | |
| N2R2 | 2.20 | ±30% | 1.29 | 0.97 | 0.15 |
| N3R3 | 3.30 | ±30% | 1.00 | 0.77 | 0.22 |
| N4R7 | 4.70 | ±30% | 0.88 | 0.67 | 0.29 |
| N6R8 | 6.80 | ±30% | 0.75 | 0.57 | 0.41 |
| M100 | 10.0 | ±20% | 0.55 | 0.45 | 0.69 |
| M150 | 15.0 | ±20% | 0.47 | 0.37 | 1.02 |
| M220 | 22.0 | ±20% | 0.39 | 0.30 | 1.47 |

0303

| Code | Inductance L(μH) At 100KHz, 1.0V | Tolerance | Rated Current (A) | | DC Resistance (Ω) ±20% |
|------|----------------------------------------|-----------|----------------------------|----------------------------------|------------------------------|
| | | | Saturation Current Idc1 | Temperature Rise Current Idc2 | |
| N1R0 | 1.00 | ±30% | 1.30 | 1.40 | 0.065 |
| N1R5 | 1.50 | ±30% | 1.20 | 1.30 | 0.08 |
| N2R2 | 2.20 | ±30% | 1.10 | 1.10 | 0.095 |
| N3R3 | 3.30 | ±30% | 0.87 | 0.94 | 0.14 |
| N4R7 | 4.70 | ±30% | 0.75 | 0.78 | 0.19 |
| N6R8 | 6.80 | ±30% | 0.61 | 0.63 | 0.30 |
| M100 | 10.0 | ±20% | 0.50 | 0.51 | 0.45 |
| M150 | 15.0 | ±20% | 0.40 | 0.40 | 0.74 |
| M220 | 22.0 | ±20% | 0.35 | 0.35 | 1.03 |
| M330 | 33.0 | ±20% | 0.26 | 0.275 | 1.55 |
| M470 | 47.0 | ±20% | 0.22 | 0.235 | 2.05 |

03A3

| Code | Inductance L(μH) At 100KHz, 1.0V | Tolerance | Rated Current (A) | | DC Resistance (Ω) ±20% |
|------|----------------------------------------|-----------|----------------------------|----------------------------------|------------------------------|
| | | | Saturation Current Idc1 | Temperature Rise Current Idc2 | |
| N1R0 | 1.00 | ±30% | 1.50 | 1.49 | 0.05 |
| N1R5 | 1.50 | ±30% | 1.36 | 1.40 | 0.06 |
| N2R2 | 2.20 | ±30% | 1.10 | 1.20 | 0.08 |
| N3R3 | 3.30 | ±30% | 0.91 | 1.05 | 0.10 |
| N4R7 | 4.70 | ±30% | 0.77 | 0.98 | 0.13 |
| N6R8 | 6.80 | ±30% | 0.67 | 0.74 | 0.19 |
| M100 | 10.0 | ±20% | 0.54 | 0.63 | 0.29 |
| M150 | 15.0 | ±20% | 0.44 | 0.485 | 0.45 |
| M220 | 22.0 | ±20% | 0.37 | 0.42 | 0.63 |
| M330 | 33.0 | ±20% | 0.31 | 0.33 | 1.03 |
| M470 | 47.0 | ±20% | 0.25 | 0.28 | 1.45 |

LMax Low Profile Power Inductor



LMLP Series – Style C

03B3

| Code | Inductance L(μ H) At 100KHz, 1.0V | Tolerance | Rated Current (A) | | DC Resistance (Ω) \pm 20% |
|------|----------------------------------------------|-----------|----------------------------|----------------------------------|--------------------------------------------|
| | | | Saturation Current Idc1 | Temperature Rise Current Idc2 | |
| N1R0 | 1.00 | \pm 30% | 2.10 | 2.10 | 0.03 |
| N1R5 | 1.50 | \pm 30% | 1.80 | 1.82 | 0.04 |
| N2R2 | 2.20 | \pm 30% | 1.48 | 1.50 | 0.06 |
| N3R3 | 3.30 | \pm 30% | 1.21 | 1.23 | 0.08 |
| N4R7 | 4.70 | \pm 30% | 1.02 | 1.04 | 0.12 |
| N6R8 | 6.80 | \pm 30% | 0.87 | 0.88 | 0.16 |
| M100 | 10.0 | \pm 20% | 0.70 | 0.71 | 0.23 |
| M150 | 15.0 | \pm 20% | 0.56 | 0.56 | 0.36 |
| M220 | 22.0 | \pm 20% | 0.47 | 0.47 | 0.52 |
| M330 | 33.0 | \pm 20% | 0.39 | 0.37 | 0.84 |
| M470 | 47.0 | \pm 20% | 0.32 | 0.30 | 1.34 |

0404

| Code | Inductance L(μ H) At 100KHz, 1.0V | Tolerance | Rated Current (A) | | DC Resistance (Ω) \pm 20% |
|------|----------------------------------------------|-----------|----------------------------|----------------------------------|--------------------------------------------|
| | | | Saturation Current Idc1 | Temperature Rise Current Idc2 | |
| N1R0 | 1.00 | \pm 30% | 1.80 | 1.05 | 0.10 |
| N2R2 | 2.20 | \pm 30% | 1.15 | 0.89 | 0.15 |
| N3R3 | 3.30 | \pm 30% | 1.10 | 0.82 | 0.18 |
| N4R7 | 4.70 | \pm 30% | 0.90 | 0.75 | 0.21 |
| N6R8 | 6.80 | \pm 30% | 0.74 | 0.62 | 0.30 |
| M100 | 10.0 | \pm 30% | 0.56 | 0.60 | 0.38 |
| M150 | 15.0 | \pm 20% | 0.47 | 0.51 | 0.51 |
| M220 | 22.0 | \pm 20% | 0.36 | 0.40 | 0.87 |
| M330 | 33.0 | \pm 20% | 0.28 | 0.30 | 1.54 |
| M470 | 47.0 | \pm 20% | 0.24 | 0.28 | 1.81 |

04A4

| Code | Inductance L(μ H) At 100KHz, 1.0V | Tolerance | Rated Current (A) | | DC Resistance (Ω) \pm 20% |
|------|----------------------------------------------|-----------|----------------------------|----------------------------------|--------------------------------------------|
| | | | Saturation Current Idc1 | Temperature Rise Current Idc2 | |
| N1R0 | 1.00 | \pm 30% | 2.50 | 1.50 | 0.06 |
| N2R2 | 2.20 | \pm 30% | 1.65 | 1.20 | 0.09 |
| N3R3 | 3.30 | \pm 30% | 1.20 | 0.98 | 0.13 |
| N4R7 | 4.70 | \pm 30% | 1.05 | 0.96 | 0.14 |
| N6R8 | 6.80 | \pm 30% | 0.90 | 0.84 | 0.18 |
| M100 | 10.0 | \pm 20% | 0.74 | 0.77 | 0.24 |
| M150 | 15.0 | \pm 20% | 0.56 | 0.60 | 0.40 |
| M220 | 22.0 | \pm 20% | 0.51 | 0.54 | 0.48 |
| M330 | 33.0 | \pm 20% | 0.40 | 0.42 | 0.81 |
| M470 | 47.0 | \pm 20% | 0.35 | 0.37 | 1.00 |

LMax Low Profile Power Inductor



LMLP Series – Style C

04B4

| Code | Inductance L(μH) At 100KHz, 1.0V | Tolerance | Rated Current (A) | | DC Resistance (Ω) ±20% |
|------|----------------------------------------|-----------|----------------------------|----------------------------------|------------------------------|
| | | | Saturation Current Idc1 | Temperature Rise Current Idc2 | |
| N1R0 | 1.00 | ±30% | 4.00 | 1.83 | 0.03 |
| N2R2 | 2.20 | ±30% | 2.70 | 1.44 | 0.06 |
| N3R3 | 3.30 | ±30% | 2.00 | 1.23 | 0.07 |
| N4R7 | 4.70 | ±30% | 1.70 | 1.20 | 0.09 |
| N6R8 | 6.80 | ±30% | 1.45 | 1.06 | 0.11 |
| M100 | 10.0 | ±20% | 1.20 | 0.84 | 0.18 |
| M150 | 15.0 | ±20% | 0.94 | 0.65 | 0.28 |
| M220 | 22.0 | ±20% | 0.80 | 0.59 | 0.36 |
| M330 | 33.0 | ±20% | 0.65 | 0.49 | 0.53 |
| M470 | 47.0 | ±20% | 0.57 | 0.42 | 0.65 |
| M680 | 68.0 | ±20% | 0.47 | 0.32 | 1.00 |
| M101 | 100 | ±20% | 0.40 | 0.27 | 1.50 |
| M151 | 150 | ±20% | 0.31 | 0.22 | 2.50 |
| M221 | 220 | ±20% | 0.27 | 0.17 | 4.00 |

0505

| Code | Inductance L(μH) At 100KHz, 1.0V | Tolerance | Rated Current (A) | | DC Resistance (Ω) ±20% |
|------|----------------------------------------|-----------|----------------------------|----------------------------------|------------------------------|
| | | | Saturation Current Idc1 | Temperature Rise Current Idc2 | |
| M100 | 10.0 | ±20% | 1.00 | 0.94 | 0.48 |

05B5

| Code | Inductance L(μH) At 100KHz, 1.0V | Tolerance | Rated Current (A) | | DC Resistance (Ω) ±20% |
|------|----------------------------------------|-----------|----------------------------|----------------------------------|------------------------------|
| | | | Saturation Current Idc1 | Temperature Rise Current Idc2 | |
| N1R5 | 1.50 | ±30% | 3.35 | 3.20 | 0.026 |
| N2R2 | 2.20 | ±30% | 2.90 | 2.90 | 0.035 |
| N3R3 | 3.30 | ±30% | 2.40 | 2.40 | 0.048 |
| N4R7 | 4.70 | ±30% | 2.00 | 2.00 | 0.06 |
| N6R8 | 6.80 | ±30% | 1.60 | 1.65 | 0.090 |
| M100 | 10.0 | ±20% | 1.30 | 1.45 | 0.12 |
| M150 | 15.0 | ±20% | 1.10 | 1.20 | 0.165 |
| M220 | 22.0 | ±20% | 0.90 | 1.00 | 0.26 |

05D5

| Code | Inductance L(μH) At 100KHz, 1.0V | Tolerance | Rated Current (A) | | DC Resistance (Ω) ±20% |
|------|----------------------------------------|-----------|----------------------------|----------------------------------|------------------------------|
| | | | Saturation Current Idc1 | Temperature Rise Current Idc2 | |
| N1R5 | 1.50 | ±30% | 6.00 | 3.60 | 0.02 |
| N2R2 | 2.20 | ±30% | 4.60 | 3.50 | 0.022 |
| N3R3 | 3.30 | ±30% | 3.80 | 3.30 | 0.027 |
| N4R7 | 4.70 | ±30% | 3.30 | 3.10 | 0.029 |
| N6R8 | 6.80 | ±30% | 2.60 | 2.30 | 0.049 |
| M100 | 10.0 | ±20% | 2.30 | 2.10 | 0.056 |
| M150 | 15.0 | ±20% | 2.00 | 1.80 | 0.08 |
| M220 | 22.0 | ±20% | 1.60 | 1.40 | 0.126 |
| M330 | 33.0 | ±20% | 1.30 | 1.20 | 0.18 |
| M470 | 47.0 | ±20% | 1.10 | 0.90 | 0.31 |

LMax Low Profile Power Inductor



LMLP Series – Style C

0606

| Code | Inductance L(μH) At 100KHz, 1.0V | Tolerance | Rated Current (A) | | DC Resistance (Ω) ±20% |
|------|----------------------------------------|-----------|----------------------------|----------------------------------|------------------------------|
| | | | Saturation Current Idc1 | Temperature Rise Current Idc2 | |
| N4R7 | 4.70 | ±30% | 1.40 | 1.40 | 0.29 |
| N6R8 | 6.80 | ±30% | 1.20 | 1.00 | 0.372 |
| M100 | 10.0 | ±20% | 1.00 | 0.85 | 0.50 |

06A6

| Code | Inductance L(μH) At 100KHz, 1.0V | Tolerance | Rated Current (A) | | DC Resistance (Ω) ±20% |
|------|----------------------------------------|-----------|----------------------------|----------------------------------|------------------------------|
| | | | Saturation Current Idc1 | Temperature Rise Current Idc2 | |
| N2R5 | 2.50 | ±30% | 2.10 | 1.73 | 0.09 |
| N4R0 | 4.00 | ±30% | 1.80 | 1.57 | 0.105 |
| N5R0 | 5.00 | ±30% | 1.50 | 1.40 | 0.11 |
| N6R8 | 6.80 | ±30% | 1.30 | 1.18 | 0.165 |
| M100 | 10.0 | ±20% | 1.00 | 1.00 | 0.235 |
| M150 | 15.0 | ±20% | 0.80 | 0.79 | 0.33 |
| M220 | 22.0 | ±20% | 0.76 | 0.63 | 0.530 |
| M330 | 23.0 | ±20% | 0.59 | 0.53 | 0.70 |
| M470 | 47.0 | ±20% | 0.52 | 0.46 | 1.05 |
| M680 | 68.0 | ±20% | 0.44 | 0.41 | 1.35 |
| M101 | 100 | ±20% | 0.35 | 0.32 | 2.18 |

06B6

| Code | Inductance L(μH) At 100KHz, 1.0V | Tolerance | Rated Current (A) | | DC Resistance (Ω) ±20% |
|------|----------------------------------------|-----------|----------------------------|----------------------------------|------------------------------|
| | | | Saturation Current Idc1 | Temperature Rise Current Idc2 | |
| N0R8 | 0.80 | ±30% | 5.50 | 3.80 | 0.02 |
| N1R5 | 1.50 | ±30% | 4.00 | 3.20 | 0.026 |
| N2R2 | 2.20 | ±30% | 3.20 | 2.70 | 0.034 |
| N3R3 | 3.30 | ±30% | 2.80 | 2.60 | 0.04 |
| N4R7 | 4.70 | ±30% | 2.40 | 2.00 | 0.058 |
| N6R8 | 6.80 | ±30% | 2.00 | 1.80 | 0.085 |
| M100 | 10.0 | ±20% | 1.70 | 1.40 | 0.125 |
| M220 | 22.0 | ±20% | 1.05 | 0.95 | 0.29 |

06C6

| Code | Inductance L(μH) At 100KHz, 1.0V | Tolerance | Rated Current (A) | | DC Resistance (Ω) ±20% |
|------|----------------------------------------|-----------|----------------------------|----------------------------------|------------------------------|
| | | | Saturation Current Idc1 | Temperature Rise Current Idc2 | |
| N1R5 | 1.50 | ±30% | 5.00 | 4.20 | 0.016 |
| N2R2 | 2.20 | ±30% | 4.20 | 3.70 | 0.02 |
| N3R0 | 3.00 | ±30% | 3.60 | 3.40 | 0.023 |
| N4R7 | 4.70 | ±30% | 2.70 | 3.00 | 0.031 |
| N6R0 | 6.00 | ±30% | 2.50 | 2.50 | 0.04 |
| M100 | 10.0 | ±20% | 1.90 | 1.90 | 0.065 |
| M150 | 15.0 | ±20% | 1.60 | 1.80 | 0.095 |
| M220 | 22.0 | ±20% | 1.30 | 1.40 | 0.135 |
| M330 | 33.0 | ±20% | 1.10 | 1.10 | 0.22 |
| M470 | 47.0 | ±20% | 0.95 | 0.92 | 0.30 |
| M680 | 68.0 | ±20% | 0.76 | 0.77 | 0.42 |
| M101 | 100 | ±20% | 0.62 | 0.66 | 0.60 |

LMax Low Profile Power Inductor



LMLP Series – Style C

06D6

| Code | Inductance L(μH) At 100KHz, 1.0V | Tolerance | Rated Current (A) | | DC Resistance (Ω) ±20% |
|------|----------------------------------------|-----------|----------------------------|----------------------------------|------------------------------|
| | | | Saturation Current Idc1 | Temperature Rise Current Idc2 | |
| N1R3 | 1.30 | ±30% | 8.00 | 4.00 | 0.016 |
| N1R8 | 1.80 | ±30% | 7.00 | 3.70 | 0.018 |
| N2R3 | 2.30 | ±30% | 6.00 | 3.50 | 0.021 |
| N3R0 | 3.00 | ±30% | 5.00 | 3.20 | 0.024 |
| N4R5 | 4.50 | ±30% | 4.00 | 3.00 | 0.031 |
| N6R3 | 6.30 | ±30% | 3.80 | 2.80 | 0.038 |
| M100 | 10.0 | ±20% | 3.00 | 2.50 | 0.047 |
| M150 | 15.0 | ±20% | 2.30 | 1.90 | 0.077 |
| M220 | 22.0 | ±20% | 1.90 | 1.50 | 0.115 |
| M330 | 33.0 | ±20% | 1.50 | 1.40 | 0.145 |
| M470 | 47.0 | ±20% | 1.30 | 1.10 | 0.22 |
| M680 | 68.0 | ±20% | 1.00 | 0.90 | 0.33 |
| M101 | 100 | ±20% | 0.80 | 0.70 | 0.50 |

0808

| Code | Inductance L(μH) At 100KHz, 1.0V | Tolerance | Rated Current (A) | | DC Resistance (Ω) ±20% |
|------|----------------------------------------|-----------|----------------------------|----------------------------------|------------------------------|
| | | | Saturation Current Idc1 | Temperature Rise Current Idc2 | |
| N0R9 | 0.90 | ±30% | 11.0 | 7.80 | 0.006 |
| N1R4 | 1.40 | ±30% | 9.00 | 7.00 | 0.007 |
| N2R0 | 2.00 | ±30% | 7.40 | 6.30 | 0.009 |
| N3R6 | 3.60 | ±30% | 5.30 | 4.90 | 0.015 |
| N4R7 | 4.70 | ±30% | 4.70 | 4.10 | 0.018 |
| N6R8 | 6.80 | ±30% | 4.00 | 3.70 | 0.025 |
| M100 | 10.0 | ±20% | 3.40 | 3.10 | 0.034 |
| M150 | 15.0 | ±20% | 2.70 | 2.40 | 0.05 |
| M220 | 22.0 | ±20% | 2.20 | 2.20 | 0.066 |
| M330 | 33.0 | ±20% | 1.90 | 1.70 | 0.10 |
| M470 | 47.0 | ±20% | 1.50 | 1.40 | 0.15 |
| M680 | 68.0 | ±20% | 1.20 | 1.10 | 0.23 |
| M101 | 100 | ±20% | 1.00 | 1.00 | 0.29 |

NOTES:

1. Operating Temp: -25°C±120°C
2. The saturation current value (Idc1) is the DC current value having inductance decrease down 30% (at 20°C).
3. The temperature rise current value (Idc2) is the DC current value having temperature increase up to 40°C (at 20°C).
4. The rated current is the DC current value that satisfies both of current value saturation current value and temperature rise current value.

LMax Low Profile/High Current Power Inductor



LMLP Series – Style D

FEATURES

- Large Current Rating
- Lower Temperature Rise
- Low Profile
- Available on tape and reel

APPLICATIONS

- Personal Computers
- Servers
- High Current POL Converters
- Low Profile High Current Power Supplies
- DC/DC Converters
- DC/DC Converters for FPGA

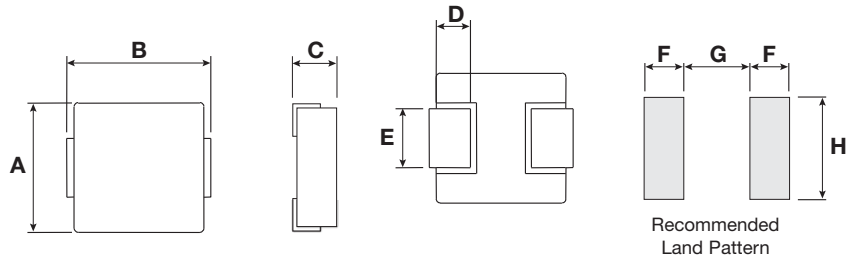
INDUCTANCE AND RATED CURRENT RANGES

- | | | |
|--------|---------------------------|--------------|
| • 0405 | 0.1 μ H ~ 3.3 μ H | 22 ~ 4 A |
| • 05A6 | 0.1 μ H ~ 4.7 μ H | 45 ~ 5 A |
| • 0506 | 0.1 μ H ~ 4.7 μ H | 27 ~ 8.2 A |
| • 0707 | 0.1 μ H ~ 4.7 μ H | 40 ~ 8 A |
| • 07A7 | 0.1 μ H ~ 10 μ H | 50 ~ 7 A |
| • 07B7 | 0.1 μ H ~ 10 μ H | 60 ~ 7 A |
| • 07C7 | 0.56 μ H ~ 10 μ H | 12 ~ 4.5 A |
| • 1011 | 0.19 μ H ~ 47 μ H | 90 ~ 3 A |
| • 13A3 | 0.1 μ H ~ 10 μ H | 84 ~ 14 A |
| • 1313 | 0.1 μ H ~ 10 μ H | 118 ~ 16 A |
| • 13B3 | 0.1 μ H ~ 10 μ H | 120 ~ 15.5 A |

- All test data taken at 25°C
- Operating Temperature Range: -55°C ~ +155°C
- I_{SAT}: The current that causes an inductance drop of approximately 25% (30% on 0405 size).
- I_{DC}: DC Current that causes an approximate Δ T of 40°C.



DIMENSIONS



mm (inches)

| Type | A | B | C | D | E | F | G | H |
|------|----------------------------|----------------------------|-----------------|----------------------------|----------------------------|-----------------|-----------------|-----------------|
| 0405 | 4.10±0.50 (0.161±0.020) | 4.50±0.50 (0.177±0.020) | 2.10 (0.083) | 0.80±0.50 (0.031±0.020) | 1.50±0.50 (0.059±0.020) | 1.50 (0.059) | 2.50 (0.098) | 2.20 (0.087) |
| 05A6 | 5.00±0.50 (0.197±0.020) | 5.50±0.50 (0.217±0.020) | 2.00 (0.083) | 1.20±0.50 (0.047±0.020) | 1.50±0.50 (0.059±0.020) | 2.00 (0.079) | 3.00 (0.118) | 2.50 (0.098) |
| 0506 | 5.00±0.50 (0.197±0.020) | 5.50±0.50 (0.217±0.020) | 3.00 (0.118) | 1.20±0.50 (0.047±0.020) | 1.50±0.50 (0.059±0.020) | 2.00 (0.079) | 3.00 (0.118) | 2.50 (0.098) |
| 0707 | 6.80 max (0.278 max) | 7.50 max (0.295 max) | 2.00 (0.083) | 1.60±0.50 (0.063±0.020) | 2.90±0.50 (0.114±0.020) | 2.50 (0.098) | 3.70 (0.146) | 3.50 (0.138) |
| 07A7 | 6.80 max (0.278 max) | 7.50 max (0.295 max) | 2.50 (0.098) | 1.60±0.50 (0.063±0.020) | 2.90±0.50 (0.114±0.020) | 2.50 (0.098) | 3.70 (0.146) | 3.50 (0.138) |
| 07B7 | 6.80 max (0.278 max) | 7.50 max (0.295 max) | 3.00 (0.118) | 1.60±0.50 (0.063±0.020) | 2.90±0.50 (0.114±0.020) | 2.50 (0.098) | 3.70 (0.146) | 3.50 (0.138) |
| 07C7 | 6.80 max (0.278 max) | 7.50 max (0.295 max) | 5.00 (0.197) | 1.60±0.50 (0.063±0.020) | 2.90±0.50 (0.114±0.020) | 2.50 (0.098) | 3.70 (0.146) | 3.50 (0.138) |
| 1011 | 10.4 max (0.409 max) | 11.5 max (0.453 max) | 4.00 (0.157) | 2.00±0.50 (0.079±0.020) | 2.90±0.50 (0.114±0.020) | 3.50 (0.138) | 6.00 (0.236) | 4.00 (0.157) |
| 13A3 | 13.0 max (0.512 max) | 14.2 max (0.559 max) | 4.00 (0.157) | 2.30±0.50 (0.091±0.020) | 3.80±0.50 (0.150±0.020) | 2.90 (0.114) | 7.90 (0.311) | 5.00 (0.197) |
| 1313 | 13.0 max (0.512 max) | 14.2 max (0.559 max) | 5.00 (0.197) | 2.30±0.50 (0.091±0.020) | 3.80±0.50 (0.150±0.020) | 2.90 (0.114) | 7.90 (0.311) | 5.00 (0.197) |
| 13B3 | 13.0 max (0.512 max) | 14.2 max (0.559 max) | 6.50 (0.256) | 2.30±0.50 (0.091±0.020) | 3.80±0.50 (0.150±0.020) | 2.90 (0.114) | 7.90 (0.311) | 5.00 (0.197) |

LMax Low Profile/High Current Power Inductor



LMLP Series – Style D

HOW TO ORDER

| | | | | | | | | |
|--------------------------|--------------------------|------------------------------------------------------|----------------------------|------------------------------------------------------------------|------------------------|------------------------------|--------------------------|----------------------------|
| LM Family | LP Series | 0707 Size | M Tolerance | R04 Inductance | D Style | T Termination | A Special | S Packaging |
| LM = Power Inductor | LP = Low Profile | 0707 = 7x7xh 07A7 = 7x7xA(h) (h = see catalog) | M = 20% | R39 = 0.390μH 3R9 = 3.900μH 390 = 39.00μH 391 = 390.0μH | | T = Sn Plate | A = Standard | S = 13" Reel |

ELECTRICAL CHARACTERISTICS

0405

| AVX PN | Inductance (μH) | Tolerance | Test Condition | DCR (Ω) | ISAT (A) | IDC (A) |
|------------------|-----------------|-----------|----------------|---------|----------|---------|
| LMLP0405MR10DTAS | 0.1 | ±20% | 100KHz, 0.25V | 4 | 22 | 12 |
| LMLP0405MR22DTAS | 0.22 | ±20% | 100KHz, 0.25V | 6.6 | 12.5 | 9 |
| LMLP0405MR47DTAS | 0.47 | ±20% | 100KHz, 0.25V | 14 | 9.5 | 7 |
| LMLP0405MR56DTAS | 0.56 | ±20% | 100KHz, 0.25V | 16 | 8.5 | 6.5 |
| LMLP0405M1R0DTAS | 1 | ±20% | 100KHz, 0.25V | 27 | 7 | 4.5 |
| LMLP0405M1R5DTAS | 1.5 | ±20% | 100KHz, 0.25V | 46 | 6 | 4 |
| LMLP0405M2R2DTAS | 2.2 | ±20% | 100KHz, 0.25V | 58 | 5 | 3 |
| LMLP0405M3R3DTAS | 3.3 | ±20% | 100KHz, 0.25V | 87 | 4 | 2.5 |

05A6

| AVX PN | Inductance (μH) | Tolerance | Test Condition | DCR (Ω) | ISAT (A) | IDC (A) |
|------------------|-----------------|-----------|----------------|---------|----------|---------|
| LMLP05A6MR10DTAS | 0.1 | ±20% | 100KHz, 0.25V | 3.9 | 45 | 17 |
| LMLP05A6MR22DTAS | 0.22 | ±20% | 100KHz, 0.25V | 5.2 | 22 | 15 |
| LMLP05A6MR33DTAS | 0.33 | ±20% | 100KHz, 0.25V | 8.2 | 25 | 12 |
| LMLP05A6MR47DTAS | 0.47 | ±20% | 100KHz, 0.25V | 9.4 | 21 | 11.5 |
| LMLP05A6MR68DTAS | 0.68 | ±20% | 100KHz, 0.25V | 12.4 | 15 | 10 |
| LMLP05A6M1R0DTAS | 1 | ±20% | 100KHz, 0.25V | 20 | 16 | 7 |
| LMLP05A6M2R2DTAS | 2.2 | ±20% | 100KHz, 0.25V | 50.1 | 12.5 | 4.2 |
| LMLP05A6M3R3DTAS | 3.3 | ±20% | 100KHz, 0.25V | 85.5 | 8.5 | 3.3 |
| LMLP05A6M4R7DTAS | 4.7 | ±20% | 100KHz, 0.25V | 116.6 | 5 | 2.8 |

0506

| AVX PN | Inductance (μH) | Tolerance | Test Condition | DCR (Ω) | ISAT (A) | IDC (A) |
|------------------|-----------------|-----------|----------------|---------|----------|---------|
| LMLP0506MR10DTAS | 0.1 | ±20% | 100KHz, 0.25V | 3.16 | 27 | 23 |
| LMLP0506MR22DTAS | 0.22 | ±20% | 100KHz, 0.25V | 4.52 | 21 | 15.5 |
| LMLP0506MR33DTAS | 0.33 | ±20% | 100KHz, 0.25V | 5.56 | 19 | 13.7 |
| LMLP0506MR47DTAS | 0.47 | ±20% | 100KHz, 0.25V | 7.04 | 16 | 12.2 |
| LMLP0506MR68DTAS | 0.68 | ±20% | 100KHz, 0.25V | 8.96 | 13.5 | 10.2 |
| LMLP0506MR82DTAS | 0.82 | ±20% | 100KHz, 0.25V | 11.9 | 13 | 9.3 |
| LMLP0506M1R0DTAS | 1 | ±20% | 100KHz, 0.25V | 13.7 | 12 | 9.2 |
| LMLP0506M1R5DTAS | 1.5 | ±20% | 100KHz, 0.25V | 20.7 | 11 | 7.2 |
| LMLP0506M2R2DTAS | 2.2 | ±20% | 100KHz, 0.25V | 29.2 | 10 | 5.8 |
| LMLP0506M3R3DTAS | 3.3 | ±20% | 100KHz, 0.25V | 54.7 | 8.5 | 5 |
| LMLP0506M4R7DTAS | 4.7 | ±20% | 100KHz, 0.25V | 77.5 | 8.2 | 3.5 |

ISAT: The current that causes an inductance drop of approximately 25% (30% on 0405 size).

IDC: DC Current that causes an approximate ΔT of 40°C.

LMax Low Profile/High Current Power Inductor



LMLP Series – Style D

0707

| AVX PN | Inductance (μH) | Tolerance | Test Condition | DCR (Ω) | IsAT (A) | I _{DC} (A) |
|------------------|-----------------|-----------|----------------|---------|----------|---------------------|
| LMLP0707MR10DTAS | 0.1 | ±20% | 100KHz, 0.25V | 3.5 | 40 | 18 |
| LMLP0707MR15DTAS | 0.15 | ±20% | 100KHz, 0.25V | 5.2 | 38 | 15 |
| LMLP0707MR22DTAS | 0.22 | ±20% | 100KHz, 0.25V | 5.7 | 26 | 14 |
| LMLP0707MR33DTAS | 0.33 | ±20% | 100KHz, 0.25V | 7 | 18 | 12 |
| LMLP0707MR47DTAS | 0.47 | ±20% | 100KHz, 0.25V | 9.3 | 18 | 11 |
| LMLP0707MR68DTAS | 0.68 | ±20% | 100KHz, 0.25V | 13.9 | 17 | 9 |
| LMLP0707MR82DTAS | 0.82 | ±20% | 100KHz, 0.25V | 15.9 | 17 | 8 |
| LMLP0707M1R0DTAS | 1 | ±20% | 100KHz, 0.25V | 18.3 | 14 | 7 |
| LMLP0707M1R5DTAS | 1.5 | ±20% | 100KHz, 0.25V | 34 | 11.5 | 4 |
| LMLP0707M2R2DTAS | 2.2 | ±20% | 100KHz, 0.25V | 46 | 13 | 3.75 |
| LMLP0707M3R3DTAS | 3.3 | ±20% | 100KHz, 0.25V | 60.1 | 10 | 3.25 |
| LMLP0707M4R7DTAS | 4.7 | ±20% | 100KHz, 0.25V | 78 | 8 | 3 |

07B7

| AVX PN | Inductance (μH) | Tolerance | Test Condition | DCR (Ω) | IsAT (A) | I _{DC} (A) |
|------------------|-----------------|-----------|----------------|---------|----------|---------------------|
| LMLP07B7MR10DTAS | 0.1 | ±20% | 100KHz, 0.25V | 1.7 | 50 | 30 |
| LMLP07B7MR22DTAS | 0.22 | ±20% | 100KHz, 0.25V | 3.2 | 34 | 21 |
| LMLP07B7MR33DTAS | 0.33 | ±20% | 100KHz, 0.25V | 4.1 | 22 | 18 |
| LMLP07B7MR47DTAS | 0.47 | ±20% | 100KHz, 0.25V | 6.5 | 21 | 13.5 |
| LMLP07B7MR68DTAS | 0.68 | ±20% | 100KHz, 0.25V | 9.4 | 18 | 11 |
| LMLP07B7MR82DTAS | 0.82 | ±20% | 100KHz, 0.25V | 11.8 | 17 | 10 |
| LMLP07B7M1R0DTAS | 1 | ±20% | 100KHz, 0.25V | 14.2 | 16 | 9 |
| LMLP07B7M1R5DTAS | 1.5 | ±20% | 100KHz, 0.25V | 21.2 | 15 | 7.5 |
| LMLP07B7M2R2DTAS | 2.2 | ±20% | 100KHz, 0.25V | 34 | 14 | 6.5 |
| LMLP07B7M3R3DTAS | 3.3 | ±20% | 100KHz, 0.25V | 51.6 | 13 | 5 |
| LMLP07B7M4R7DTAS | 4.7 | ±20% | 100KHz, 0.25V | 63 | 10 | 4.5 |
| LMLP07B7M6R8DTAS | 6.8 | ±20% | 100KHz, 0.25V | 95 | 9 | 3.5 |
| LMLP07B7M8R2DTAS | 8.2 | ±20% | 100KHz, 0.25V | 106 | 8 | 3 |
| LMLP07B7M100DTAS | 10 | ±20% | 100KHz, 0.25V | 129 | 7 | 2.5 |

07A7

| AVX PN | Inductance (μH) | Tolerance | Test Condition | DCR (Ω) | IsAT (A) | I _{DC} (A) |
|------------------|-----------------|-----------|----------------|---------|----------|---------------------|
| LMLP07A7MR10DTAS | 0.1 | ±20% | 100KHz, 0.25V | 1.7 | 60 | 32.5 |
| LMLP07A7MR22DTAS | 0.22 | ±20% | 100KHz, 0.25V | 2.8 | 40 | 23 |
| LMLP07A7MR33DTAS | 0.33 | ±20% | 100KHz, 0.25V | 3.9 | 30 | 20 |
| LMLP07A7MR47DTAS | 0.47 | ±20% | 100KHz, 0.25V | 4.2 | 26 | 17.5 |
| LMLP07A7MR68DTAS | 0.68 | ±20% | 100KHz, 0.25V | 5.5 | 25 | 15.5 |
| LMLP07A7MR82DTAS | 0.82 | ±20% | 100KHz, 0.25V | 8 | 24 | 13 |
| LMLP07A7M1R0DTAS | 1 | ±20% | 100KHz, 0.25V | 10 | 22 | 11 |
| LMLP07A7M1R5DTAS | 1.5 | ±20% | 100KHz, 0.25V | 15 | 18 | 9 |
| LMLP07A7M2R2DTAS | 2.2 | ±20% | 100KHz, 0.25V | 20 | 14 | 8 |
| LMLP07A7M3R3DTAS | 3.3 | ±20% | 100KHz, 0.25V | 30 | 13.5 | 6 |
| LMLP07A7M4R7DTAS | 4.7 | ±20% | 100KHz, 0.25V | 40 | 10 | 5.5 |
| LMLP07A7M6R8DTAS | 6.8 | ±20% | 100KHz, 0.25V | 60 | 8 | 4.5 |
| LMLP07A7M8R2DTAS | 8.2 | ±20% | 100KHz, 0.25V | 68 | 7.5 | 4 |
| LMLP07A7M100DTAS | 10 | ±20% | 100KHz, 0.25V | 105 | 7 | 3 |

IsAT: The current that causes an inductance drop of approximately 25%.
I_{DC}: DC Current that causes an approximate ΔT of 40°C.

LMax Low Profile/High Current Power Inductor



LMLP Series – Style D

07C7

| AVX PN | Inductance (μH) | Tolerance | Test Condition | DCR (Ω) | IsAT (A) | I _{DC} (A) |
|------------------|-----------------|-----------|----------------|---------|----------|---------------------|
| LMLP07C7MR56DTAS | 0.56 | ±20% | 100KHz, 0.25V | 3.6 | 12 | 20 |
| LMLP07C7MR68DTAS | 0.68 | ±20% | 100KHz, 0.25V | 4.5 | 11.5 | 18 |
| LMLP07C7MR82DTAS | 0.82 | ±20% | 100KHz, 0.25V | 4.9 | 13 | 16.5 |
| LMLP07C7M1R0DTAS | 1 | ±20% | 100KHz, 0.25V | 6.5 | 15 | 13 |
| LMLP07C7M1R5DTAS | 1.5 | ±20% | 100KHz, 0.25V | 9 | 12 | 12 |
| LMLP07C7M2R2DTAS | 2.2 | ±20% | 100KHz, 0.25V | 13.6 | 10 | 10 |
| LMLP07C7M3R3DTAS | 3.3 | ±20% | 100KHz, 0.25V | 20.9 | 8 | 8 |
| LMLP07C7M4R7DTAS | 4.7 | ±20% | 100KHz, 0.25V | 30.3 | 7 | 6.5 |
| LMLP07C7M5R6DTAS | 5.6 | ±20% | 100KHz, 0.25V | 34.4 | 7 | 6 |
| LMLP07C7M6R8DTAS | 6.8 | ±20% | 100KHz, 0.25V | 44.6 | 5.5 | 5.5 |
| LMLP07C7M8R2DTAS | 8.2 | ±20% | 100KHz, 0.25V | 50.7 | 5 | 5 |
| LMLP07C7M100DTAS | 10 | ±20% | 100KHz, 0.25V | 71.3 | 4.5 | 4.5 |

1011

| AVX PN | Inductance (μH) | Tolerance | Test Condition | DCR (Ω) | IsAT (A) | I _{DC} (A) |
|------------------|-----------------|-----------|----------------|---------|----------|---------------------|
| LMLP1011MR19DTAS | 0.19 | ±20% | 100KHz, 0.25V | 0.95 | 90 | 40 |
| LMLP1011MR36DTAS | 0.36 | ±20% | 100KHz, 0.25V | 1.4 | 60 | 31.5 |
| LMLP1011MR47DTAS | 0.47 | ±20% | 100KHz, 0.25V | 1.6 | 38 | 26 |
| LMLP1011MR56DTAS | 0.56 | ±20% | 100KHz, 0.25V | 1.8 | 49 | 27.5 |
| LMLP1011M1R0DTAS | 1 | ±20% | 100KHz, 0.25V | 4.1 | 36 | 17.5 |
| LMLP1011M1R5DTAS | 1.5 | ±20% | 100KHz, 0.25V | 5.8 | 27.5 | 15 |
| LMLP1011M2R2DTAS | 2.2 | ±20% | 100KHz, 0.25V | 9 | 25.6 | 12 |
| LMLP1011M3R3DTAS | 3.3 | ±20% | 100KHz, 0.25V | 11.8 | 18.6 | 10 |
| LMLP1011M4R7DTAS | 4.7 | ±20% | 100KHz, 0.25V | 16.5 | 17 | 9.5 |
| LMLP1011M5R6DTAS | 5.6 | ±20% | 100KHz, 0.25V | 19.3 | 16 | 8.5 |
| LMLP1011M6R8DTAS | 6.8 | ±20% | 100KHz, 0.25V | 23.3 | 13.5 | 8 |
| LMLP1011M100DTAS | 10 | ±20% | 100KHz, 0.25V | 36.5 | 12 | 6.8 |
| LMLP1011M150DTAS | 15 | ±20% | 100KHz, 0.25V | 65 | 7 | 3.5 |
| LMLP1011M220DTAS | 22 | ±20% | 100KHz, 0.25V | 120 | 3 | 2 |
| LMLP1011M330DTAS | 33 | ±20% | 100KHz, 0.25V | 200 | 2.8 | 1.8 |
| LMLP1011M470DTAS | 47 | ±20% | 100KHz, 0.25V | 210 | 3 | 1.2 |

13A3

| AVX PN | Inductance (μH) | Tolerance | Test Condition | DCR (Ω) | IsAT (A) | I _{DC} (A) |
|------------------|-----------------|-----------|----------------|---------|----------|---------------------|
| LMLP13A3MR10DTAS | 0.1 | ±20% | 100KHz, 0.25V | 0.96 | 84 | 43 |
| LMLP13A3MR15DTAS | 0.15 | ±20% | 100KHz, 0.25V | 1.2 | 75 | 41 |
| LMLP13A3MR22DTAS | 0.22 | ±20% | 100KHz, 0.25V | 1.3 | 65 | 38.5 |
| LMLP13A3MR33DTAS | 0.33 | ±20% | 100KHz, 0.25V | 1.5 | 62 | 36.5 |
| LMLP13A3MR47DTAS | 0.47 | ±20% | 100KHz, 0.25V | 2 | 55 | 32 |
| LMLP13A3MR60DTAS | 0.6 | ±20% | 100KHz, 0.25V | 2.2 | 51 | 29 |
| LMLP13A3MR68DTAS | 0.68 | ±20% | 100KHz, 0.25V | 2.5 | 49 | 28 |
| LMLP13A3MR82DTAS | 0.82 | ±20% | 100KHz, 0.25V | 3 | 44 | 25 |
| LMLP13A3M1R0DTAS | 1 | ±20% | 100KHz, 0.25V | 3.5 | 40 | 24 |
| LMLP13A3M1R5DTAS | 1.5 | ±20% | 100KHz, 0.25V | 5.5 | 35 | 19 |
| LMLP13A3M1R8DTAS | 1.8 | ±20% | 100KHz, 0.25V | 7 | 30 | 16.5 |
| LMLP13A3M2R2DTAS | 2.2 | ±20% | 100KHz, 0.25V | 8 | 29 | 16 |
| LMLP13A3M3R3DTAS | 3.3 | ±20% | 100KHz, 0.25V | 12 | 27 | 12 |
| LMLP13A3M4R7DTAS | 4.7 | ±20% | 100KHz, 0.25V | 15 | 24 | 10 |
| LMLP13A3M5R6DTAS | 5.6 | ±20% | 100KHz, 0.25V | 19 | 19 | 9.5 |
| LMLP13A3M6R8DTAS | 6.8 | ±20% | 100KHz, 0.25V | 22 | 18 | 9 |
| LMLP13A3M8R2DTAS | 8.2 | ±20% | 100KHz, 0.25V | 28 | 16 | 8.5 |
| LMLP13A3M100DTAS | 10 | ±20% | 100KHz, 0.25V | 34 | 14 | 7 |

I_{SAT}: The current that causes an inductance drop of approximately 25%.

I_{DC}: DC Current that causes an approximate ΔT of 40°C.

LMax Low Profile/High Current Power Inductor



LMLP Series – Style D

1313

| AVX PN | Inductance (μH) | Tolerance | Test Condition | DCR (Ω) | IsAT (A) | I _{DC} (A) |
|------------------|-----------------|-----------|----------------|---------|----------|---------------------|
| LMLP1313MR10DTAS | 0.1 | ±20% | 100KHz, 0.25V | 6 | 118 | 55 |
| LMLP1313MR22DTAS | 0.22 | ±20% | 100KHz, 0.25V | 0.8 | 110 | 51 |
| LMLP1313MR33DTAS | 0.33 | ±20% | 100KHz, 0.25V | 1.1 | 80 | 42 |
| LMLP1313MR47DTAS | 0.47 | ±20% | 100KHz, 0.25V | 1.3 | 65 | 38 |
| LMLP1313MR56DTAS | 0.56 | ±20% | 100KHz, 0.25V | 1.5 | 55 | 36 |
| LMLP1313MR68DTAS | 0.68 | ±20% | 100KHz, 0.25V | 1.7 | 54 | 34 |
| LMLP1313MR82DTAS | 0.82 | ±20% | 100KHz, 0.25V | 2.3 | 53 | 31 |
| LMLP1313M1R0DTAS | 1 | ±20% | 100KHz, 0.25V | 2.5 | 50 | 29 |
| LMLP1313M1R5DTAS | 1.5 | ±20% | 100KHz, 0.25V | 4.1 | 48 | 23 |
| LMLP1313M1R8DTAS | 1.8 | ±20% | 100KHz, 0.25V | 4.9 | 40 | 19 |
| LMLP1313M2R2DTAS | 2.2 | ±20% | 100KHz, 0.25V | 5.5 | 32 | 20 |
| LMLP1313M3R3DTAS | 3.3 | ±20% | 100KHz, 0.25V | 9.2 | 32 | 15 |
| LMLP1313M4R7DTAS | 4.7 | ±20% | 100KHz, 0.25V | 15 | 27 | 12 |
| LMLP1313M5R6DTAS | 5.6 | ±20% | 100KHz, 0.25V | 16.5 | 22 | 11.5 |
| LMLP1313M6R8DTAS | 6.8 | ±20% | 100KHz, 0.25V | 18.5 | 21 | 11 |
| LMLP1313M7R8DTAS | 7.8 | ±20% | 100KHz, 0.25V | 20.5 | 18 | 10 |
| LMLP1313M8R2DTAS | 8.2 | ±20% | 100KHz, 0.25V | 22.5 | 18 | 9.5 |
| LMLP1313M100DTAS | 10 | ±20% | 100KHz, 0.25V | 25.5 | 16 | 9 |

13B3

| AVX PN | Inductance (μH) | Tolerance | Test Condition | DCR (Ω) | IsAT (A) | I _{DC} (A) |
|------------------|-----------------|-----------|----------------|---------|----------|---------------------|
| LMLP13B3MR10DTAS | 0.1 | ±20% | 100KHz, 0.25V | 0.5 | 120 | 60 |
| LMLP13B3MR15DTAS | 0.15 | ±20% | 100KHz, 0.25V | 0.6 | 118 | 55 |
| LMLP13B3MR22DTAS | 0.22 | ±20% | 100KHz, 0.25V | 0.7 | 112 | 53 |
| LMLP13B3MR30DTAS | 0.3 | ±20% | 100KHz, 0.25V | 0.8 | 72 | 48 |
| LMLP13B3MR33DTAS | 0.33 | ±20% | 100KHz, 0.25V | 0.9 | 65 | 46 |
| LMLP13B3MR40DTAS | 0.4 | ±20% | 100KHz, 0.25V | 1 | 64 | 44 |
| LMLP13B3MR47DTAS | 0.47 | ±20% | 100KHz, 0.25V | 1.2 | 63 | 41 |
| LMLP13B3MR56DTAS | 0.56 | ±20% | 100KHz, 0.25V | 1.4 | 62 | 37 |
| LMLP13B3MR68DTAS | 0.68 | ±20% | 100KHz, 0.25V | 1.6 | 60 | 35 |
| LMLP13B3MR82DTAS | 0.82 | ±20% | 100KHz, 0.25V | 1.9 | 50 | 33 |
| LMLP13B3M1R0DTAS | 1 | ±20% | 100KHz, 0.25V | 2 | 49 | 32 |
| LMLP13B3M1R2DTAS | 1.2 | ±20% | 100KHz, 0.25V | 2.5 | 48 | 30 |
| LMLP13B3M1R5DTAS | 1.5 | ±20% | 100KHz, 0.25V | 3 | 45 | 27 |
| LMLP13B3M1R8DTAS | 1.8 | ±20% | 100KHz, 0.25V | 3.2 | 41 | 24 |
| LMLP13B3M2R2DTAS | 2.2 | ±20% | 100KHz, 0.25V | 4.2 | 40 | 22 |
| LMLP13B3M3R3DTAS | 3.3 | ±20% | 100KHz, 0.25V | 6.8 | 35 | 18 |
| LMLP13B3M4R7DTAS | 4.7 | ±20% | 100KHz, 0.25V | 8.7 | 32 | 13.5 |
| LMLP13B3M5R6DTAS | 5.6 | ±20% | 100KHz, 0.25V | 10 | 32 | 13.5 |
| LMLP13B3M6R8DTAS | 6.8 | ±20% | 100KHz, 0.25V | 14 | 16.5 | 11.5 |
| LMLP13B3M8R2DTAS | 8.2 | ±20% | 100KHz, 0.25V | 15.5 | 16 | 10.5 |
| LMLP13B3M100DTAS | 10 | ±20% | 100KHz, 0.25V | 17.2 | 15.5 | 10 |

I_{SAT}: The current that causes an inductance drop of approximately 25%.

I_{DC}: DC Current that causes an approximate ΔT of 40°C.

LMax Low Profile/High Current Power Inductor



LMLP Series – Style D

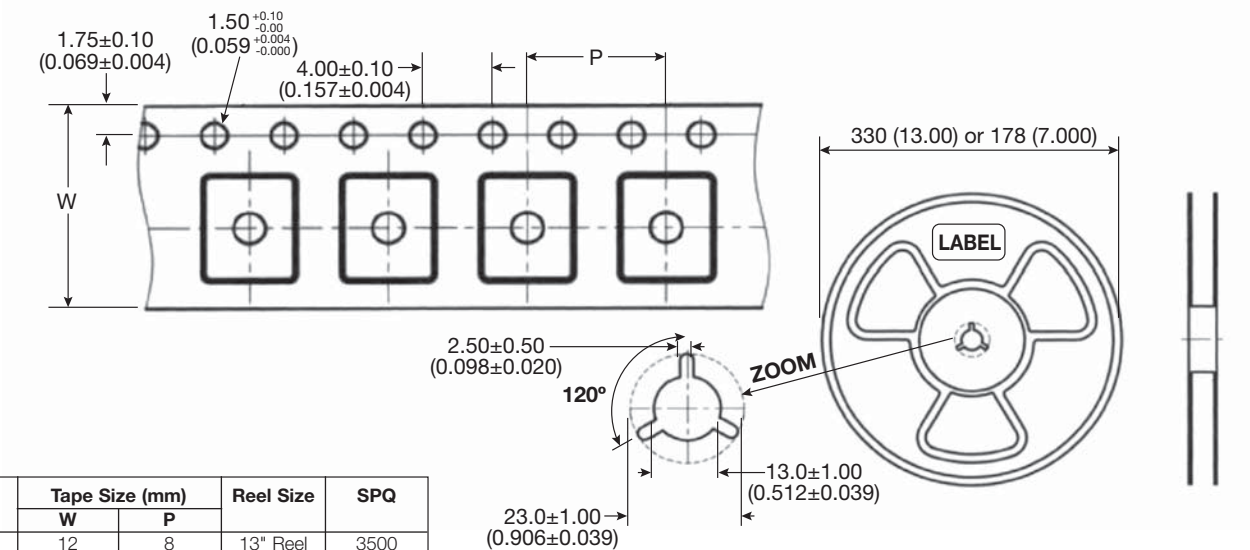
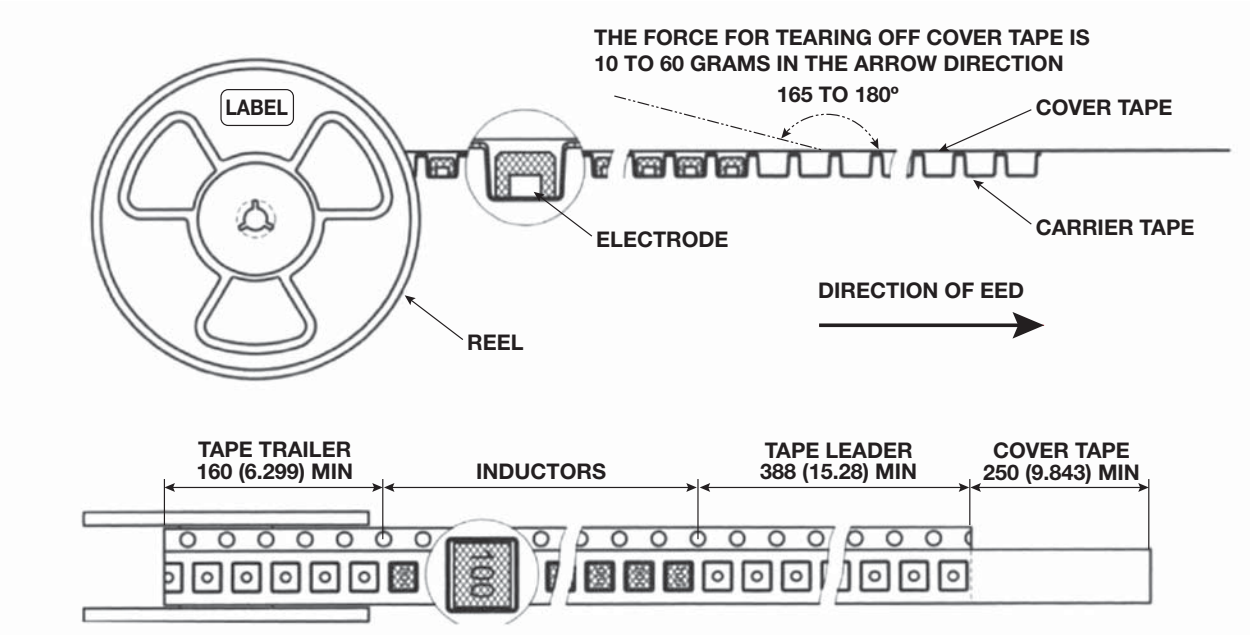
GENERAL CHARACTERISTICS

| Items | Requirement | Test Methods | | |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------|
| Solderability | More than 90% of the terminal electrode should be covered with solder. | 230±5°C for 4±1 seconds | | |
| Solder Heat Resistance | Inductance value must remain within 20% of initial value. No disconnection or short circuit. No change in appearance. | 260±5°C for 4±1 seconds | | |
| Heat Resistance | Inductance value must remain within 20% of initial value. No disconnection or short circuit. No change in appearance. | Temperature: 125±5°C Time: 500 hours Tested after 2 hours at room temperature | | |
| Cold Resistance | Inductance value must remain within 20% of initial value. No disconnection or short circuit. No change in appearance. | Temperature: -40±5°C Time: 500 hours Tested after 2 hours at room temperature | | |
| Thermal Shock | Inductance value must remain within 20% of initial value. No disconnection or short circuit. No change in appearance. | One Cycle | | |
| | | Step | Temperature (°C) | Time (min.) |
| | | 1 | -40±5°C | 30 |
| | | 2 | Room Temperature | 3 |
| | | 3 | 125±5°C | 30 |
| 4 | Room Temperature | 3 | | |
| Humidity Resistance | Inductance value must remain within 20% of initial value. No disconnection or short circuit. No change in appearance. | Temperature: 40±2°C at 90~95% relative humidity . Time: 500 Hours Tested after 2 hours at room temperature | | |
| Vibration Test | Inductance value must remain within ±5% of initial value. No change in appearance | After 1 hour of vibrations testing, in each of three orientations at 10Hz, then increase to 55Hz, then decrease to 10Hz with 1.52mm P-P amplitudes. | | |

LMax Low Profile/High Current Power Inductor



LMLP Series – Style D



| Size Code | Tape Size (mm) | | Reel Size | SPQ |
|-----------|----------------|----|-----------|------|
| | W | P | | |
| 0405 | 12 | 8 | 13" Reel | 3500 |
| 05A6 | 12 | 8 | 13" Reel | 3000 |
| 0506 | 12 | 8 | 13" Reel | 2500 |
| 0707 | 16 | 12 | 13" Reel | 2000 |
| 07A7 | 16 | 12 | 13" Reel | 2000 |
| 07B7 | 16 | 12 | 13" Reel | 1500 |
| 07C7 | 16 | 12 | 13" Reel | 800 |
| 1011 | 24 | 16 | 13" Reel | 1000 |
| 13A3 | 24 | 16 | 13" Reel | 1000 |
| 1313 | 24 | 16 | 13" Reel | 500 |
| 13B3 | 24 | 16 | 13" Reel | 500 |



LMax Low Profile Power Inductor



LMLP Series – Style M

FEATURES

- Very low profile.
- Constructed enclosed in a rugged to provide optimum pick and place operations.
- High inductance & high current ultra low profile power inductors.

APPLICATIONS

- LCD Televisions
- Personal Computers
- Handheld Communication
- DC/DC Converters, etc.

CHARACTERISTICS

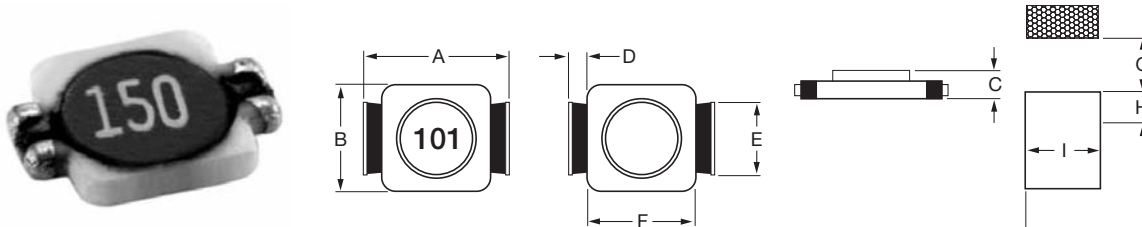
- Rated Current (IDC): The DC current when the inductance becomes 10% lower than its initial value. (Ta=25°C)
- Operating temperature range: -40 ~ +100°C

INDUCTANCE AND RATED CURRENT RANGES

- 0606 1.2 ~ 330μH 2.1 ~ 0.13A
- 06A6 1.2 ~ 100μH 1.8 ~ 0.235A
- 06B6 1.0 ~ 1000μH 2.5 ~ 0.08A
- Electrical specifications at 25°C



DIMENSIONS



mm (inches)

| Type | A max | B ±0.3 | C max | D | E | F | G | H | I |
|------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 0606 | 6.50 (0.256) | 5.30 (0.209) | 1.20 (0.047) | 0.90 (0.035) | 3.00 (0.118) | 4.50 (0.177) | 4.00 (0.157) | 1.50 (0.059) | 3.40 (0.134) |
| 06A6 | 6.50 (0.256) | 5.30 (0.209) | 1.20 (0.047) | 0.90 (0.035) | 3.00 (0.118) | 4.50 (0.177) | 4.00 (0.157) | 1.50 (0.059) | 3.40 (0.134) |
| 06B6 | 6.50 (0.256) | 5.30 (0.209) | 2.00 (0.079) | 0.90 (0.035) | 3.00 (0.118) | 4.50 (0.177) | 4.00 (0.157) | 1.50 (0.059) | 3.40 (0.134) |

HOW TO ORDER

| | | | | | | | | |
|---------------------|------------------|-------------|------------------|-------------------------------------------------|--------------|--------------------|----------------|------------------|
| LM | LP | 0606 | M | R04 | M | T | A | S |
| Family | Series | Size | Tolerance | Inductance | Style | Termination | Special | Packaging |
| LM = Power Inductor | LP = Low Profile | See table | M = 20% | 3R9 = 3.900μH 390 = 39.00μH 391 = 390.0μH | | T = Sn Plate | A = Standard | S = 13" Reel |



LMax Low Profile Power Inductor



LMLP Series – Style M

ELECTRICAL CHARACTERISTICS

0606

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | I sat (A) max* |
|-------|--------|-----------|----------------|--------------|----------------|
| 1R2 | 1.2 | M | 100KHz, 0.1V | 0.08 | 2.1 |
| 1R5 | 1.5 | M | 100KHz, 0.1V | 0.10 | 1.9 |
| 2R2 | 2.2 | M | 100KHz, 0.1V | 0.12 | 1.6 |
| 3R3 | 3.3 | M | 100KHz, 0.1V | 0.16 | 1.3 |
| 4R7 | 4.7 | M | 100KHz, 0.1V | 0.20 | 1.1 |
| 6R8 | 6.8 | M | 100KHz, 0.1V | 0.32 | 0.9 |
| 100 | 10 | M | 100KHz, 0.1V | 0.41 | 0.8 |
| 150 | 15 | M | 100KHz, 0.1V | 0.65 | 0.65 |
| 220 | 22 | M | 100KHz, 0.1V | 0.85 | 0.50 |
| 330 | 33 | M | 100KHz, 0.1V | 1.30 | 0.40 |
| 470 | 47 | M | 100KHz, 0.1V | 1.80 | 0.35 |
| 680 | 68 | M | 100KHz, 0.1V | 2.50 | 0.30 |
| 101 | 100 | M | 100KHz, 0.1V | 3.50 | 0.25 |
| 151 | 150 | M | 100KHz, 0.1V | 6.50 | 0.18 |
| 221 | 220 | M | 100KHz, 0.1V | 8.50 | 0.16 |
| 331 | 330 | M | 100KHz, 0.1V | 15.0 | 0.13 |

06A6

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | I sat (A) max* |
|-------|--------|-----------|----------------|--------------|----------------|
| 1R2 | 1.2 | M | 100KHz, 0.1V | 0.060 | 1.80 |
| 2R2 | 2.2 | M | 100KHz, 0.1V | 0.125 | 1.20 |
| 3R3 | 3.3 | M | 100KHz, 0.1V | 0.155 | 0.96 |
| 4R7 | 4.7 | M | 100KHz, 0.1V | 0.206 | 0.90 |
| 6R8 | 6.8 | M | 100KHz, 0.1V | 0.240 | 0.80 |
| 100 | 10 | M | 100KHz, 0.1V | 0.370 | 0.70 |
| 150 | 15 | M | 100KHz, 0.1V | 0.460 | 0.60 |
| 180 | 18 | M | 100KHz, 0.1V | 0.580 | 0.56 |
| 220 | 22 | M | 100KHz, 0.1V | 0.668 | 0.50 |
| 270 | 27 | M | 100KHz, 0.1V | 0.950 | 0.45 |
| 330 | 33 | M | 100KHz, 0.1V | 1.100 | 0.42 |
| 390 | 39 | M | 100KHz, 0.1V | 1.280 | 0.38 |
| 470 | 47 | M | 100KHz, 0.1V | 1.380 | 0.34 |
| 560 | 56 | M | 100KHz, 0.1V | 1.700 | 0.30 |
| 680 | 68 | M | 100KHz, 0.1V | 2.100 | 0.28 |
| 820 | 82 | M | 100KHz, 0.1V | 2.700 | 0.26 |
| 101 | 100 | M | 100KHz, 0.1V | 3.100 | 0.235 |

06B6

| Codes | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | I sat (A) max* |
|-------|--------|-----------|----------------|--------------|----------------|
| 1R0 | 1.0 | M | 100KHz, 0.1V | 0.04 | 2.5 |
| 1R5 | 1.5 | M | 100KHz, 0.1V | 0.06 | 2.2 |
| 2R2 | 2.2 | M | 100KHz, 0.1V | 0.07 | 1.8 |
| 3R3 | 3.3 | M | 100KHz, 0.1V | 0.10 | 1.4 |
| 4R7 | 4.7 | M | 100KHz, 0.1V | 0.12 | 1.2 |
| 6R8 | 6.8 | M | 100KHz, 0.1V | 0.19 | 1.1 |
| 100 | 10 | M | 100KHz, 0.1V | 0.30 | 1.0 |
| 150 | 15 | M | 100KHz, 0.1V | 0.40 | 0.8 |
| 220 | 22 | M | 100KHz, 0.1V | 0.54 | 0.6 |
| 330 | 33 | M | 100KHz, 0.1V | 0.74 | 0.5 |
| 470 | 47 | M | 100KHz, 0.1V | 1.10 | 0.45 |
| 680 | 68 | M | 100KHz, 0.1V | 1.60 | 0.35 |
| 101 | 100 | M | 100KHz, 0.1V | 2.30 | 0.30 |
| 151 | 150 | M | 100KHz, 0.1V | 3.20 | 0.25 |
| 221 | 220 | M | 100KHz, 0.1V | 5.70 | 0.20 |
| 331 | 330 | M | 100KHz, 0.1V | 8.20 | 0.16 |
| 471 | 470 | M | 100KHz, 0.1V | 10.8 | 0.14 |
| 681 | 680 | M | 100KHz, 0.1V | 17.2 | 0.12 |
| 102 | 1000 | M | 100KHz, 0.1V | 22.6 | 0.08 |

*Saturation Current: The DC current when the inductance becomes 10% lower than its initial value. (Ta=25°C)



LMax Low Profile Power Inductor



LMLP Series – Style O

FEATURES

- Very low profile
- High current rating up to 1.4 Amps.
- Density design, small size, and low cost

APPLICATIONS

- Camcorder
- LCD TV
- MP3 Player
- GPS, PDAs
- Portable CDR-W
- Digital Cameras
- DC/DC Converters, etc

CHARACTERISTICS

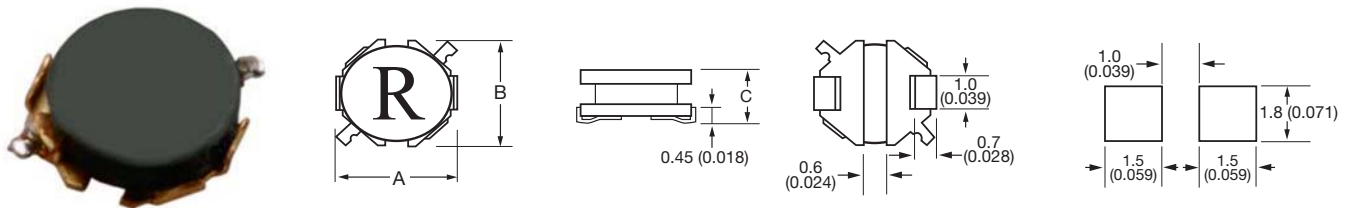
- Rated Current (IDC): The DC current when the inductance becomes 30% lower than its initial value. (Ta=25°C)
- Operating temperature range: -40 ~ +100°C

INDUCTANCE AND RATED CURRENT RANGES

- 0312 1.0 ~ 68µH 1.40 ~ 0.17A
- Electrical specifications at 25°C



DIMENSIONS



mm (inches)

| Type | A | B | C max |
|------|--------------------------------|--------------------------------|-----------------|
| 0303 | 3.20 ± 0.30 (0.126 ± 0.012) | 3.20 ± 0.30 (0.126 ± 0.012) | 1.20 (0.047) |

HOW TO ORDER

| | | | | | | | | |
|---------------------|------------------|-------------|--------------------|--------------------------------|--------------|--------------------|----------------|------------------|
| LM | LP | 0303 | M | R04 | O | T | A | R |
| Family | Series | Size | Tolerance | Inductance | Style | Termination | Special | Packaging |
| LM = Power Inductor | LP = Low Profile | 0303 | M = 20% N = 30% | 3R9 = 3.900µH 390 = 39.00µH | | T = Sn Plate | A = Standard | R = 7" Reel |

ELECTRICAL CHARACTERISTICS

| 0303 | | | | | | |
|-------|--------|-----------|----------------|--------------|----------------|---------|
| Codes | L (µH) | Tolerance | Test Condition | DCR (Ω) max. | I sat (A) max* | Marking |
| 1R0 | 1.0 | N | 100KHz, 0.1V | 0.08 | 1.40 | A |
| 1R8 | 1.8 | N | 100KHz, 0.1V | 0.11 | 1.10 | C |
| 2R2 | 2.2 | N | 100KHz, 0.1V | 0.12 | 1.00 | D |
| 2R7 | 2.7 | N | 100KHz, 0.1V | 0.15 | 0.95 | E |
| 4R7 | 4.7 | N | 100KHz, 0.1V | 0.28 | 0.75 | H |
| 5R6 | 5.6 | N | 100KHz, 0.1V | 0.31 | 0.68 | I |
| 6R8 | 6.8 | N | 100KHz, 0.1V | 0.36 | 0.62 | K |
| 7R5 | 7.5 | N | 100KHz, 0.1V | 0.39 | 0.60 | L |
| 100 | 10 | M | 100KHz, 0.1V | 0.43 | 0.53 | M |
| 150 | 15 | M | 100KHz, 0.1V | 0.72 | 0.44 | O |
| 220 | 22 | M | 100KHz, 0.1V | 1.18 | 0.33 | R |
| 330 | 33 | M | 100KHz, 0.1V | 1.90 | 0.26 | T |
| 470 | 47 | M | 100KHz, 0.1V | 2.45 | 0.23 | V |
| 680 | 68 | M | 100KHz, 0.1V | 4.20 | 0.17 | X |

*Saturation Current: The DC current when the inductance becomes 30% lower than its initial value. (Ta=25°C)



LMax Low Profile Power Inductor



LMLP Series – Style R

FEATURES

- Low profile, low RDC, lower resistance and high current handling capacities
- Flat bottom surface ensures secure, reliable surface mounting
- Magnetically shielded structure allows high-density mounting configurations

APPLICATIONS

- PDA, DSC, PDA and Other Electronic Equipments
- Hard Disk Drives
- Low Profile/ Low Resistance Specifically Suitable For Portable Telephones

INDUCTANCE AND RATED CURRENT RANGES

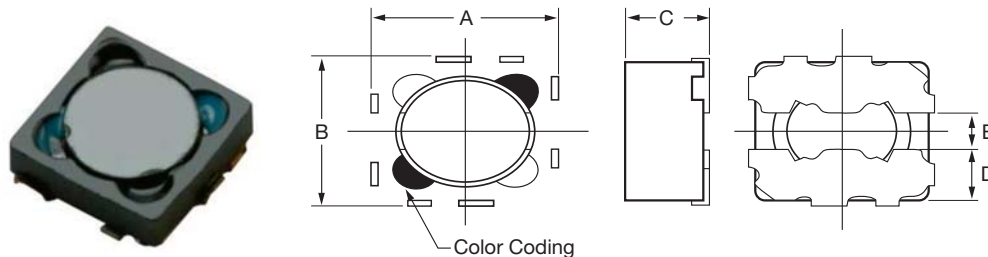
- 0303 1.2 ~ 47 μ H 1.40 ~ 0.18A
- 03A3 (R) 1.0 ~ 18 μ H 1.40 ~ 0.30A
- 03A3 (H) 0.47 ~ 100 μ H 3.40 ~ 0.24A
- 03B3 (R) 1.0 ~ 27 μ H 1.36 ~ 0.22A
- 03B3 (H) 1.0 ~ 33 μ H 3.00 ~ 0.47A
- 0404 1.0 ~ 33 μ H 3.00 ~ 0.42A
- 04A4 0.5 ~ 47 μ H 3.90 ~ 0.34A
- 04B4 1.0 ~ 100 μ H 3.20 ~ 0.26A
- Test equipment:
L: HP4284A Precision LCR meter
DCR: Milli-ohm meter
- Electrical specifications at 25°C



CHARACTERISTICS

- Saturation Rated Current(I_{DC}): The current when the inductance becomes 10% or 35% lower than its initial value.
- Temperature Rise Current(I_{rms}): For a 25% rise above 25°C ambient.
- Operating temperature range: -25 ~ 105°C

DIMENSIONS



mm (inches)

| Type | A | B | C max | D | E | H | I | J |
|----------------------------|--------------------------------|--------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 0303 | 3.20 ± 0.20 (0.126 ± 0.008) | 3.20 ± 0.20 (0.126 ± 0.008) | 1.05 (0.041) | 1.10 (0.043) | 0.80 (0.031) | 3.60 (0.142) | 1.40 (0.055) | 0.80 (0.031) |
| 03A3 / 03A3 (R) / 03A3 (H) | 3.20 ± 0.20 (0.126 ± 0.008) | 3.20 ± 0.20 (0.126 ± 0.008) | 1.60 (0.063) | 1.10 (0.043) | 0.80 (0.031) | 3.60 (0.142) | 1.40 (0.055) | 0.80 (0.031) |
| 03B3 (R) / 03B3 (H) | 3.20 ± 0.20 (0.126 ± 0.008) | 3.20 ± 0.20 (0.126 ± 0.008) | 1.80 (0.071) | 1.10 (0.043) | 0.80 (0.031) | 3.60 (0.142) | 1.40 (0.055) | 0.80 (0.031) |
| 0404 | 4.20 ± 0.20 (0.165 ± 0.008) | 4.20 ± 0.20 (0.165 ± 0.008) | 1.25 (0.049) | 1.30 (0.051) | 1.40 (0.055) | 4.60 (0.181) | 1.60 (0.063) | 1.40 (0.055) |
| 04A4 | 4.20 ± 0.20 (0.165 ± 0.008) | 4.20 ± 0.20 (0.165 ± 0.008) | 1.60 (0.063) | 1.30 (0.051) | 1.40 (0.055) | 4.60 (0.181) | 1.60 (0.063) | 1.40 (0.055) |
| 04B4 | 4.20 ± 0.20 (0.165 ± 0.008) | 4.20 ± 0.20 (0.165 ± 0.008) | 1.80 (0.071) | 1.30 (0.051) | 1.40 (0.055) | 4.60 (0.181) | 1.60 (0.063) | 1.40 (0.055) |

HOW TO ORDER

| | | | | | | | | |
|---------------------|------------------|------------------------------------------------------|--------------------|-------------------------------------------------------------------|--------------|--------------------------------------------------------|----------------|------------------|
| LM | LP | 0303 | M | R04 | R | T | A | R |
| Family | Series | Size | Tolerance | Inductance | Style | Termination | Special | Packaging |
| LM = Power Inductor | LP = Low Profile | 0303 = 3x3xh 03A3 = 3x3xA(h) (h = see catalog) | M = 20% N = 30% | 3R9 = 3.900 μ H 390 = 39.00 μ H 391 = 390.0 μ H | T = Sn Plate | A = Standard R = Low Resistance H = High Current | R = 7" Reel | |



LMax Low Profile Power Inductor



LMLP Series – Style R

ELECTRICAL CHARACTERISTICS

0303

| Codes | L (uH) | Tolerance | Test Condition | DCR (Ω) Typ. | I sat (A) Typ.* | | I rms (A) Typ. | Color Code |
|-------|--------|-----------|----------------|--------------|-----------------|------------|----------------|------------|
| | | | | | L drop 10% | L drop 35% | | |
| 1R2 | 1.2 | N,M | 1KHz, 1V | 0.070 | 1.00 | 1.40 | 1.50 | Black |
| 1R5 | 1.5 | N,M | 1KHz, 1V | 0.087 | 1.00 | 1.36 | 1.40 | Brown |
| 1R8 | 1.8 | N,M | 1KHz, 1V | 0.097 | 0.90 | 1.24 | 1.35 | Red |
| 2R2 | 2.2 | N,M | 1KHz, 1V | 0.136 | 0.80 | 0.97 | 1.10 | Orange |
| 2R7 | 2.7 | N,M | 1KHz, 1V | 0.127 | 0.76 | 0.94 | 1.10 | Yellow |
| 3R3 | 3.3 | N,M | 1KHz, 1V | 0.175 | 0.68 | 0.88 | 1.00 | Green |
| 3R9 | 3.9 | N,M | 1KHz, 1V | 0.200 | 0.62 | 0.84 | 0.90 | Blue |
| 4R7 | 4.7 | N,M | 1KHz, 1V | 0.274 | 0.60 | 0.82 | 0.85 | Violet |
| 5R6 | 5.6 | N,M | 1KHz, 1V | 0.319 | 0.54 | 0.72 | 0.75 | Gray |
| 6R8 | 6.8 | N,M | 1KHz, 1V | 0.330 | 0.46 | 0.60 | 0.70 | White |
| 8R2 | 8.2 | N,M | 1KHz, 1V | 0.420 | 0.44 | 0.58 | 0.65 | Black |
| 100 | 10 | M | 1KHz, 1V | 0.470 | 0.42 | 0.54 | 0.60 | Brown |
| 120 | 12 | M | 1KHz, 1V | 0.675 | 0.32 | 0.44 | 0.55 | Red |
| 150 | 15 | M | 1KHz, 1V | 0.800 | 0.30 | 0.40 | 0.50 | Orange |
| 180 | 18 | M | 1KHz, 1V | 0.890 | 0.30 | 0.38 | 0.45 | Yellow |
| 220 | 22 | M | 1KHz, 1V | 1.110 | 0.26 | 0.32 | 0.40 | Green |
| 270 | 27 | M | 1KHz, 1V | 1.600 | 0.24 | 0.30 | 0.34 | Black |
| 330 | 33 | M | 1KHz, 1V | 1.600 | 0.22 | 0.28 | 0.34 | Blue |
| 470 | 47 | M | 1KHz, 1V | 2.430 | 0.18 | 0.22 | 0.24 | Black |

03A3R

| Codes | L (uH) | Tolerance | Test Condition | DCR (Ω) Typ. | I sat (A) Typ.* | | I rms (A) Typ. | Color Code |
|-------|--------|-----------|----------------|--------------|-----------------|------------|----------------|------------|
| | | | | | L drop 10% | L drop 35% | | |
| 1R0 | 1.0 | N,M | 1KHz, 1V | 0.038 | 1.04 | 1.40 | 1.80 | Green |
| 1R2 | 1.2 | N,M | 1KHz, 1V | 0.041 | 1.00 | 1.30 | 1.74 | Blue |
| 1R5 | 1.5 | N,M | 1KHz, 1V | 0.046 | 0.94 | 1.22 | 1.70 | Violet |
| 1R8 | 1.8 | N,M | 1KHz, 1V | 0.058 | 0.92 | 1.16 | 1.64 | Gray |
| 2R2 | 2.2 | N,M | 1KHz, 1V | 0.066 | 0.88 | 1.10 | 1.60 | White |
| 2R7 | 2.7 | N,M | 1KHz, 1V | 0.070 | 0.74 | 0.93 | 1.45 | Green |
| 3R3 | 3.3 | N,M | 1KHz, 1V | 0.091 | 0.68 | 0.90 | 1.24 | Blue |
| 3R9 | 3.9 | N,M | 1KHz, 1V | 0.115 | 0.62 | 0.82 | 1.12 | Violet |
| 4R7 | 4.7 | N,M | 1KHz, 1V | 0.132 | 0.60 | 0.74 | 1.10 | Gray |
| 5R6 | 5.6 | N,M | 1KHz, 1V | 0.156 | 0.58 | 0.70 | 1.06 | White |
| 6R8 | 6.8 | N,M | 1KHz, 1V | 0.166 | 0.42 | 0.62 | 1.00 | Green |
| 8R2 | 8.2 | N,M | 1KHz, 1V | 0.230 | 0.40 | 0.58 | 0.90 | Blue |
| 100 | 10 | M | 1KHz, 1V | 0.244 | 0.38 | 0.50 | 0.80 | Violet |
| 120 | 12 | M | 1KHz, 1V | 0.324 | 0.36 | 0.44 | 0.70 | Gray |
| 150 | 15 | M | 1KHz, 1V | 0.370 | 0.36 | 0.42 | 0.70 | White |
| 180 | 18 | M | 1KHz, 1V | 0.489 | 0.30 | 0.38 | 0.62 | Green |

LMax Low Profile Power Inductor



LMLP Series – Style R

03A3H

| Codes | L (uH) | Tolerance | Test Condition | DCR (Ω) Typ. | I sat (A) Typ.* | | I rms (A) Typ. | Color Code |
|-------|--------|-----------|----------------|-----------------------|-----------------|------------|----------------|------------|
| | | | | | L drop 10% | L drop 35% | | |
| R47 | 0.47 | N,M | 1KHz, 1V | 0.040 | 3.00 | 3.40 | 2.20 | Black |
| 1R0 | 1.0 | N,M | 1KHz, 1V | 0.049 | 2.60 | 3.00 | 2.00 | Black |
| 1R2 | 1.2 | N,M | 1KHz, 1V | 0.083 | 2.30 | 2.50 | 1.90 | Brown |
| 1R5 | 1.5 | N,M | 1KHz, 1V | 0.090 | 2.10 | 2.50 | 1.50 | Brown |
| 2R2 | 2.2 | N,M | 1KHz, 1V | 0.090 | 1.80 | 2.10 | 1.28 | Red |
| 3R3 | 3.3 | N,M | 1KHz, 1V | 0.149 | 1.50 | 1.72 | 1.10 | Orange |
| 3R9 | 3.9 | N,M | 1KHz, 1V | 0.158 | 1.40 | 1.56 | 1.02 | Yellow |
| 4R7 | 4.7 | N,M | 1KHz, 1V | 0.197 | 1.30 | 1.50 | 0.96 | Black |
| 5R6 | 5.6 | N,M | 1KHz, 1V | 0.232 | 1.20 | 1.30 | 0.94 | Black |
| 6R8 | 6.8 | N,M | 1KHz, 1V | 0.266 | 1.10 | 1.30 | 0.84 | Brown |
| 100 | 10 | M | 1KHz, 1V | 0.403 | 0.94 | 1.10 | 0.74 | Red |
| 150 | 15 | M | 1KHz, 1V | 0.567 | 0.76 | 0.86 | 0.60 | Orange |
| 220 | 22 | M | 1KHz, 1V | 0.905 | 0.60 | 0.68 | 0.46 | Yellow |
| 330 | 33 | M | 1KHz, 1V | 1.486 | 0.44 | 0.48 | 0.40 | Black |
| 470 | 47 | M | 1KHz, 1V | 1.814 | 0.40 | 0.44 | 0.26 | Brown |
| 680 | 68 | M | 1KHz, 1V | 3.520 | 0.29 | 0.33 | 0.26 | Orange |
| 101 | 100 | M | 1KHz, 1V | 3.840 | 0.24 | 0.28 | 0.24 | Black |

03B3R

| Codes | L (uH) | Tolerance | Test Condition | DCR (Ω) Typ. | I sat (A) Typ.* | | I rms (A) Typ. | Color Code |
|-------|--------|-----------|----------------|-----------------------|-----------------|------------|----------------|------------|
| | | | | | L drop 10% | L drop 35% | | |
| 1R0 | 1.0 | N,M | 1KHz, 1V | 0.038 | 0.96 | 1.36 | 1.80 | Green |
| 1R2 | 1.2 | N,M | 1KHz, 1V | 0.041 | 0.94 | 1.22 | 1.76 | Blue |
| 1R5 | 1.5 | N,M | 1KHz, 1V | 0.048 | 0.90 | 1.14 | 1.70 | Violet |
| 1R8 | 1.8 | N,M | 1KHz, 1V | 0.052 | 0.84 | 1.04 | 1.68 | Gray |
| 2R2 | 2.2 | N,M | 1KHz, 1V | 0.055 | 0.75 | 0.95 | 1.64 | White |
| 2R7 | 2.7 | N,M | 1KHz, 1V | 0.060 | 0.68 | 0.90 | 1.46 | Green |
| 3R3 | 3.3 | N,M | 1KHz, 1V | 0.078 | 0.60 | 0.80 | 1.40 | Blue |
| 3R9 | 3.9 | N,M | 1KHz, 1V | 0.090 | 0.58 | 0.80 | 1.22 | Violet |
| 4R7 | 4.7 | N,M | 1KHz, 1V | 0.099 | 0.54 | 0.74 | 1.20 | Gray |
| 5R6 | 5.6 | N,M | 1KHz, 1V | 0.110 | 0.50 | 0.66 | 1.12 | White |
| 6R8 | 6.8 | N,M | 1KHz, 1V | 0.120 | 0.48 | 0.60 | 1.06 | Green |
| 8R2 | 8.2 | N,M | 1KHz, 1V | 0.168 | 0.40 | 0.54 | 0.90 | Blue |
| 100 | 10 | M | 1KHz, 1V | 0.190 | 0.36 | 0.46 | 0.88 | Violet |
| 120 | 12 | M | 1KHz, 1V | 0.222 | 0.32 | 0.46 | 0.80 | Gray |
| 150 | 15 | M | 1KHz, 1V | 0.285 | 0.30 | 0.40 | 0.72 | White |
| 180 | 18 | M | 1KHz, 1V | 0.350 | 0.28 | 0.38 | 0.66 | Green |
| 220 | 22 | M | 1KHz, 1V | 0.440 | 0.24 | 0.32 | 0.50 | Blue |
| 270 | 27 | M | 1KHz, 1V | 0.490 | 0.22 | 0.28 | 0.42 | Violet |

03B3H

| Codes | L (uH) | Tolerance | Test Condition | DCR (Ω) Typ. | I sat (A) Typ.* | | I rms (A) Typ. | Color Code |
|-------|--------|-----------|----------------|-----------------------|-----------------|------------|----------------|------------|
| | | | | | L drop 10% | L drop 35% | | |
| 1R0 | 1.0 | N,M | 1KHz, 1V | 0.045 | 2.60 | 3.00 | 2.00 | Black |
| 1R8 | 1.8 | N,M | 1KHz, 1V | 0.078 | 2.00 | 2.30 | 1.76 | Brown |
| 2R2 | 2.2 | N,M | 1KHz, 1V | 0.090 | 1.80 | 2.14 | 1.44 | Red |
| 3R3 | 3.3 | N,M | 1KHz, 1V | 0.103 | 1.50 | 1.80 | 1.10 | Orange |
| 3R9 | 3.9 | N,M | 1KHz, 1V | 0.115 | 1.50 | 1.78 | 1.05 | Yellow |
| 4R7 | 4.7 | N,M | 1KHz, 1V | 0.152 | 1.40 | 1.60 | 1.00 | Black |
| 6R8 | 6.8 | N,M | 1KHz, 1V | 0.223 | 1.20 | 1.40 | 0.95 | Brown |
| 100 | 10 | M | 1KHz, 1V | 0.360 | 0.92 | 1.02 | 0.78 | Red |
| 120 | 12 | M | 1KHz, 1V | 0.410 | 0.84 | 0.98 | 0.68 | Orange |
| 150 | 15 | M | 1KHz, 1V | 0.622 | 0.80 | 0.90 | 0.62 | Yellow |
| 220 | 22 | M | 1KHz, 1V | 0.750 | 0.64 | 0.74 | 0.45 | Black |
| 330 | 33 | M | 1KHz, 1V | 1.125 | 0.47 | 0.52 | 0.42 | Brown |

LMax Low Profile Power Inductor



LMLP Series – Style R

0404

| Codes | L (uH) | Tolerance | Test Condition | DCR (Ω) Typ. | I sat (A) Typ.* | | I rms (A) Typ. | Color Code |
|-------|--------|-----------|----------------|-----------------------|-----------------|------------|----------------|------------|
| | | | | | L drop 10% | L drop 35% | | |
| 1R0 | 1.0 | N,M | 1KHz, 1V | 0.045 | 2.30 | 3.00 | 2.00 | Black |
| 1R2 | 1.2 | N,M | 1KHz, 1V | 0.048 | 2.20 | 2.80 | 1.90 | Brown |
| 1R5 | 1.5 | N,M | 1KHz, 1V | 0.055 | 1.90 | 2.40 | 1.80 | Red |
| 1R8 | 1.8 | N,M | 1KHz, 1V | 0.073 | 1.80 | 2.30 | 1.75 | Orange |
| 2R2 | 2.2 | N,M | 1KHz, 1V | 0.083 | 1.70 | 2.10 | 1.75 | Yellow |
| 2R7 | 2.7 | N,M | 1KHz, 1V | 0.109 | 1.40 | 1.70 | 1.44 | Green |
| 3R3 | 3.3 | N,M | 1KHz, 1V | 0.118 | 1.30 | 1.70 | 1.40 | Blue |
| 3R9 | 3.9 | N,M | 1KHz, 1V | 0.143 | 1.26 | 1.60 | 1.30 | Violet |
| 4R7 | 4.7 | N,M | 1KHz, 1V | 0.159 | 1.24 | 1.58 | 1.20 | Gray |
| 5R6 | 5.6 | N,M | 1KHz, 1V | 0.213 | 1.00 | 1.30 | 1.00 | White |
| 6R8 | 6.8 | N,M | 1KHz, 1V | 0.224 | 1.00 | 1.30 | 0.96 | Black |
| 8R2 | 8.2 | N,M | 1KHz, 1V | 0.252 | 0.92 | 1.14 | 0.94 | Brown |
| 100 | 10 | M | 1KHz, 1V | 0.327 | 0.86 | 1.06 | 0.90 | Red |
| 120 | 12 | M | 1KHz, 1V | 0.363 | 0.80 | 0.98 | 0.82 | Orange |
| 150 | 15 | M | 1KHz, 1V | 0.516 | 0.60 | 0.80 | 0.64 | Yellow |
| 180 | 18 | M | 1KHz, 1V | 0.625 | 0.56 | 0.76 | 0.60 | Green |
| 220 | 22 | M | 1KHz, 1V | 0.732 | 0.46 | 0.64 | 0.52 | Blue |
| 330 | 33 | M | 1KHz, 1V | 1.165 | 0.42 | 0.50 | 0.42 | Violet |

04A4

| Codes | L (uH) | Tolerance | Test Condition | DCR (Ω) Typ. | I sat (A) Typ.* | | I rms (A) Typ. | Color Code |
|-------|--------|-----------|----------------|-----------------------|-----------------|------------|----------------|------------|
| | | | | | L drop 10% | L drop 35% | | |
| R50 | 0.5 | N | 1KHz, 1V | 0.035 | 3.10 | 3.90 | 2.50 | Black |
| 1R0 | 1.0 | N,M | 1KHz, 1V | 0.040 | 2.30 | 3.00 | 2.40 | Black |
| 1R2 | 1.2 | N,M | 1KHz, 1V | 0.043 | 2.20 | 2.80 | 2.34 | Brown |
| 1R5 | 1.5 | N,M | 1KHz, 1V | 0.050 | 2.00 | 2.60 | 2.30 | Red |
| 1R8 | 1.8 | N,M | 1KHz, 1V | 0.055 | 1.66 | 2.30 | 2.10 | Orange |
| 2R2 | 2.2 | N,M | 1KHz, 1V | 0.071 | 1.60 | 2.20 | 2.00 | Yellow |
| 2R7 | 2.7 | N,M | 1KHz, 1V | 0.078 | 1.40 | 2.00 | 1.60 | Green |
| 3R3 | 3.3 | N,M | 1KHz, 1V | 0.087 | 1.34 | 2.00 | 1.60 | Blue |
| 3R9 | 3.9 | N,M | 1KHz, 1V | 0.100 | 1.20 | 1.80 | 1.50 | Violet |
| 4R7 | 4.7 | N,M | 1KHz, 1V | 0.137 | 1.14 | 1.60 | 1.40 | Gray |
| 5R6 | 5.6 | N,M | 1KHz, 1V | 0.147 | 1.06 | 1.46 | 1.20 | White |
| 6R8 | 6.8 | N,M | 1KHz, 1V | 0.170 | 1.00 | 1.40 | 1.15 | Black |
| 8R2 | 8.2 | N,M | 1KHz, 1V | 0.195 | 0.94 | 1.28 | 1.10 | Brown |
| 100 | 10 | M | 1KHz, 1V | 0.228 | 0.90 | 1.16 | 1.02 | Red |
| 120 | 12 | M | 1KHz, 1V | 0.275 | 0.88 | 1.08 | 0.90 | Orange |
| 150 | 15 | M | 1KHz, 1V | 0.340 | 0.64 | 0.86 | 0.72 | Yellow |
| 180 | 18 | M | 1KHz, 1V | 0.380 | 0.60 | 0.82 | 0.68 | Green |
| 220 | 22 | M | 1KHz, 1V | 0.495 | 0.54 | 0.74 | 0.65 | Blue |
| 270 | 27 | M | 1KHz, 1V | 0.735 | 0.50 | 0.70 | 0.55 | Violet |
| 330 | 33 | M | 1KHz, 1V | 0.890 | 0.46 | 0.58 | 0.48 | Gray |
| 390 | 39 | M | 1KHz, 1V | 1.000 | 0.40 | 0.56 | 0.42 | White |
| 470 | 47 | M | 1KHz, 1V | 1.150 | 0.34 | 0.52 | 0.35 | Black |

LMax Low Profile Power Inductor



LMLP Series – Style R

04B4

| Codes | L (uH) | Tolerance | Test Condition | DCR (Ω) Typ. | I sat (A) Typ.* | | I rms (A) Typ. | Color Code |
|-------|--------|-----------|----------------|-----------------------|-----------------|------------|----------------|------------|
| | | | | | L drop 10% | L drop 35% | | |
| 1R0 | 1.0 | N,M | 1KHz, 1V | 0.038 | 2.60 | 3.20 | 2.40 | Black |
| 1R2 | 1.2 | N,M | 1KHz, 1V | 0.044 | 2.40 | 3.00 | 2.20 | Brown |
| 1R5 | 1.5 | N,M | 1KHz, 1V | 0.050 | 2.20 | 2.70 | 2.20 | Red |
| 1R8 | 1.8 | N,M | 1KHz, 1V | 0.045 | 1.90 | 2.40 | 2.00 | Orange |
| 2R2 | 2.2 | N,M | 1KHz, 1V | 0.062 | 1.80 | 2.20 | 1.90 | Yellow |
| 2R7 | 2.7 | N,M | 1KHz, 1V | 0.068 | 1.70 | 2.10 | 1.80 | Green |
| 3R3 | 3.3 | N,M | 1KHz, 1V | 0.080 | 1.50 | 1.88 | 1.65 | Blue |
| 3R9 | 3.9 | N,M | 1KHz, 1V | 0.084 | 1.40 | 1.80 | 1.56 | Violet |
| 4R7 | 4.7 | N,M | 1KHz, 1V | 0.099 | 1.22 | 1.46 | 1.40 | Gray |
| 5R6 | 5.6 | N,M | 1KHz, 1V | 0.110 | 1.16 | 1.48 | 1.30 | White |
| 6R8 | 6.8 | N,M | 1KHz, 1V | 0.128 | 1.02 | 1.26 | 1.20 | Black |
| 8R2 | 8.2 | N,M | 1KHz, 1V | 0.146 | 1.000 | 1.24 | 1.15 | Brown |
| 100 | 10 | M | 1KHz, 1V | 0.165 | 0.90 | 1.10 | 1.05 | Red |
| 120 | 12 | M | 1KHz, 1V | 0.254 | 0.84 | 1.00 | 0.80 | Orange |
| 150 | 15 | M | 1KHz, 1V | 0.320 | 0.74 | 0.88 | 0.72 | Yellow |
| 180 | 18 | M | 1KHz, 1V | 0.360 | 0.70 | 0.84 | 0.68 | Green |
| 220 | 22 | M | 1KHz, 1V | 0.418 | 0.60 | 0.74 | 0.65 | Blue |
| 270 | 27 | M | 1KHz, 1V | 0.450 | 0.56 | 0.70 | 0.60 | Violet |
| 330 | 33 | M | 1KHz, 1V | 0.620 | 0.46 | 0.58 | 0.58 | Gray |
| 390 | 39 | M | 1KHz, 1V | 0.650 | 0.45 | 0.56 | 0.48 | White |
| 470 | 47 | M | 1KHz, 1V | 0.790 | 0.43 | 0.52 | 0.45 | Black |
| 560 | 56 | M | 1KHz, 1V | 0.862 | 0.38 | 0.48 | 0.40 | Brown |
| 680 | 68 | M | 1KHz, 1V | 1.000 | 0.30 | 0.40 | 0.36 | Red |
| 101 | 100 | M | 1KHz, 1V | 1.380 | 0.26 | 0.32 | 0.36 | Yellow |

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