

Type SC10, SC15, SC30, SC55 Series

Key Features

- Wide Inductance Range
- Insulated Packaging
- Four Sizes
- Flame Retardant
- Wide Temperature Range
- Established Reliability
- Fully Protected from the Environment
- Available from Distribution



TE Connectivity quality and reliability are guaranteed in this range of insulated and shielded RF Inductors. The insulated range has a self-extinguishing polyolefin sleeve. Their small size make them ideal for use when space is at a premium. And they are also fully protected from environmental factors. Electrostatic and electromagnetic screening is provided by the magnetic enclosure. A wide range of values are available and the self-extinguishing polyolefin sleeve enhances environmental protection. The SC series was originally designed for military applications but now has widespread industrial use.

Characteristics - Electrical

| | SC10 | SC15 | SC30 | SC55 |
|---|-------------------------------|--|-----------------|-----------------|
| Inductance Range: | | See Table - E12 Grid (Non-standard values available to special order) | | |
| Selection Tolerance: | ±10% | ±10% | ±10% | ±10% |
| Power Rating at 70°C: | 0.33W | See Below | 0.25W | 0.30W |
| Isolation Voltage: | 700V DC or AC peak | | | |
| Limits of Inductance Change: | 5% after 1000 hours endurance | | | |
| Operating Temperature Range: | -55°C to +100°C | -55°C to +100°C | -55°C to +100°C | -55°C to +125°C |
| Recommended Storage Temperature: | 0°C to +35°C | | | |
| Climatic Category: | 55/100/21 | 55/100/21 | 55/100/21 | 55/125/21 |

SC15 Power Rating Values between 0.15uH and 4.7uH - Power Rating 0.33 Watt
 Values between 5.6uH and 330uH - Power Rating 0.20 Watt

Packaging and Marking

| Type | Ammo Pack | Reeled | Weight per Component | Marking |
|------|------------|-------------|----------------------|---------|
| SC10 | 500 Pieces | 1500 Pieces | - | LC10 |
| SC15 | 500 Pieces | 1500 Pieces | - | LC15 |
| SC30 | 500 Pieces | 2500 Pieces | - | LC30 |
| SC55 | 500 Pieces | 1500 Pieces | 0.6g | LC55 |

Dimensions



| Size | L Max. | D Max. | l Min. | d |
|------|--------|--------|--------|-------|
| SC10 | 10.0mm | 4.2mm | 25mm | 0.6mm |
| SC15 | 10.0mm | 4.5mm | 30mm | 0.6mm |
| SC30 | 7.0mm | 2.8mm | 25mm | 0.5mm |
| SC55 | 11.4mm | 5.2mm | 30mm | 0.6mm |

Type SC10, SC15, SC30, SC55 Series

Characteristics - Electrical - Type SC10 - Section 1

| Inductance Value - μ H | Inductance Code | Test Freq. MHz | Q Factor Min. | S.R.F. MHz Min. | Max. DC Resistance Ohms at 20°C | Direct Current at 70°C Max. mA |
|----------------------------|-----------------|----------------|---------------|-----------------|---------------------------------|--------------------------------|
| 0.10 | R10 | 25 | 50 | 500 | 0.055 | 2060 |
| 0.12 | R12 | 25 | 50 | 475 | 0.060 | 1970 |
| 0.15 | R15 | 25 | 50 | 450 | 0.065 | 1900 |
| 0.18 | R18 | 25 | 50 | 425 | 0.070 | 1830 |
| 0.22 | R22 | 25 | 50 | 400 | 0.075 | 1770 |
| 0.27 | R27 | 25 | 50 | 380 | 0.085 | 1660 |
| 0.33 | R33 | 25 | 50 | 360 | 0.095 | 1570 |
| 0.39 | R39 | 25 | 50 | 330 | 0.11 | 1460 |
| 0.47 | R47 | 25 | 50 | 300 | 0.12 | 1390 |
| 0.56 | R56 | 25 | 50 | 280 | 0.14 | 1290 |
| 0.68 | R68 | 25 | 45 | 260 | 0.16 | 1210 |
| 0.82 | R82 | 25 | 45 | 235 | 0.26 | 950 |
| 1.0 | 1R0 | 25 | 45 | 210 | 0.30 | 880 |
| 1.2 | 1R2 | 7.9 | 32 | 190 | 0.50 | 685 |
| 1.5 | 1R5 | 7.9 | 32 | 170 | 0.60 | 625 |
| 1.8 | 1R8 | 7.9 | 32 | 156 | 0.75 | 560 |
| 2.2 | 2R2 | 7.9 | 32 | 140 | 1.10 | 460 |
| 2.7 | 2R7 | 7.9 | 32 | 125 | 1.40 | 410 |
| 3.3 | 3R3 | 7.9 | 32 | 115 | 1.90 | 350 |

Type SC10 - Section 2

| Inductance Value - μ H | Inductance Code | Test Freq. MHz | Q Factor Min. | S.R.F. MHz Min. | Max. DC Resistance Ohms at 20°C | Direct Current at 70°C Max. mA |
|----------------------------|-----------------|----------------|---------------|-----------------|---------------------------------|--------------------------------|
| 3.9 | 3R9 | 7.9 | 45 | 75 | 0.25 | 970 |
| 4.7 | 4R7 | 7.9 | 45 | 65 | 0.35 | 820 |
| 5.6 | 5R6 | 7.9 | 45 | 60 | 0.40 | 765 |
| 6.8 | 6R8 | 7.9 | 45 | 55 | 0.55 | 650 |
| 8.2 | 8R2 | 7.9 | 45 | 50 | 0.75 | 560 |
| 10 | 100 | 7.9 | 45 | 45 | 0.9 | 510 |
| 12 | 120 | 2.5 | 55 | 40 | 1.1 | 460 |
| 15 | 150 | 2.5 | 55 | 35 | 1.5 | 395 |
| 18 | 180 | 2.5 | 55 | 30 | 2.7 | 295 |
| 22 | 220 | 2.5 | 55 | 27 | 3.0 | 280 |
| 27 | 270 | 2.5 | 55 | 25 | 4.5 | 230 |
| 33 | 330 | 2.5 | 55 | 22 | 5.2 | 210 |
| 39 | 390 | 2.5 | 55 | 20 | 7.5 | 175 |
| 47 | 470 | 2.5 | 55 | 18 | 9.6 | 156 |

Type SC10 - Section 3

| Inductance Value - μ H | Inductance Code | Test Freq. MHz | Q Factor Min. | S.R.F. MHz Min. | Max. DC Resistance Ohms at 20°C | Direct Current at 70°C Max. mA |
|----------------------------|-----------------|----------------|---------------|-----------------|---------------------------------|--------------------------------|
| 56 | 560 | 2.5 | 55 | 11 | 8.1 | 170 |
| 68 | 680 | 2.5 | 55 | 10 | 9.0 | 161 |
| 82 | 820 | 2.5 | 50 | 8.5 | 10.0 | 153 |
| 100 | 101 | 2.5 | 50 | 7.0 | 11.0 | 146 |
| 120 | 121 | 0.79 | 40 | 6.5 | 12.0 | 140 |
| 150 | 151 | 0.79 | 40 | 5.5 | 13.0 | 134 |
| 180 | 181 | 0.79 | 45 | 5.0 | 15.0 | 125 |
| 220 | 221 | 0.79 | 45 | 4.2 | 17.0 | 117 |
| 270 | 271 | 0.79 | 45 | 3.8 | 19.5 | 110 |
| 330 | 331 | 0.79 | 45 | 3.3 | 22.0 | 103 |
| 390 | 391 | 0.79 | 45 | 3.1 | 24.5 | 98 |
| 470 | 471 | 0.79 | 45 | 2.9 | 26.5 | 94 |
| 560 | 561 | 0.79 | 45 | 2.7 | 30.0 | 88 |
| 680 | 681 | 0.79 | 45 | 2.5 | 33.0 | 84 |
| 820 | 821 | 0.79 | 45 | 2.3 | 36.5 | 80 |
| 1000 | 102 | 0.79 | 40 | 2.2 | 40.0 | 76 |

Section 1 was formerly the TE Connectivity C10 Series, Section 2 was formerly the TE Connectivity C11 Series, Section 3 was formerly the TE Connectivity C12 Series

Type SC10, SC15, SC30, SC55 Series

Characteristics - Electrical Type SC15

| Inductance Value - μ H | Inductance Code | Test Freq. MHz | Q Factor Min. | S.R.F. MHz Min. | Max. DC Resistance Ohms at 20°C | Direct Current at 70°C Max. mA |
|----------------------------|-----------------|----------------|---------------|-----------------|---------------------------------|--------------------------------|
| 0.15 | R15 | 25 | 50 | 525 | 0.030 | 2790 |
| 0.18 | R18 | 25 | 45 | 480 | 0.040 | 2420 |
| 0.22 | R22 | 25 | 50 | 450 | 0.055 | 2060 |
| 0.27 | R27 | 25 | 45 | 400 | 0.070 | 1830 |
| 0.33 | R33 | 25 | 45 | 360 | 0.090 | 1610 |
| 0.39 | R39 | 25 | 45 | 350 | 0.100 | 1530 |
| 0.47 | R47 | 25 | 45 | 310 | 0.120 | 1400 |
| 0.56 | R56 | 25 | 50 | 280 | 0.135 | 1320 |
| 0.68 | R68 | 25 | 50 | 250 | 0.15 | 1250 |
| 0.82 | R82 | 25 | 50 | 220 | 0.22 | 1030 |
| 1.0 | 1R0 | 25 | 50 | 200 | 0.29 | 900 |
| 1.2 | 1R2 | 7.9 | 33 | 180 | 0.42 | 750 |
| 1.5 | 1R5 | 7.9 | 33 | 160 | 0.50 | 685 |
| 1.8 | 1R8 | 7.9 | 33 | 150 | 0.65 | 600 |
| 2.2 | 2R2 | 7.9 | 33 | 135 | 0.95 | 495 |
| 2.7 | 2R7 | 7.9 | 33 | 120 | 1.20 | 440 |
| 3.3 | 3R3 | 7.9 | 33 | 110 | 2.00 | 340 |
| 3.9 | 3R9 | 7.9 | 33 | 100 | 2.30 | 320 |
| 4.7 | 4R7 | 7.9 | 33 | 90 | 2.60 | 300 |
| 5.6 | 5R6 | 7.9 | 45 | 60 | 0.32 | 690 |
| 6.8 | 6R8 | 7.9 | 50 | 55 | 0.50 | 550 |
| 8.2 | 8R2 | 7.9 | 50 | 50 | 0.60 | 505 |
| 10 | 100 | 7.9 | 55 | 45 | 0.90 | 415 |
| 12 | 120 | 2.5 | 65 | 42 | 1.10 | 375 |
| 15 | 150 | 2.5 | 65 | 40 | 1.40 | 330 |
| 18 | 180 | 2.5 | 75 | 34 | 2.25 | 260 |
| 22 | 220 | 2.5 | 75 | 30 | 2.50 | 250 |
| 24* | 240* | 2.5 | 60 | 27 | 2.50 | 250 |
| 27 | 270 | 2.5 | 60 | 25 | 2.60 | 242 |
| 30 | 300 | 2.5 | 65 | 21 | 2.80 | 230 |
| 33 | 330 | 2.5 | 65 | 19 | 3.00 | 227 |
| 36* | 360* | 2.5 | 60 | 15.5 | 2.50 | 250 |
| 39 | 390 | 2.5 | 60 | 14.5 | 2.60 | 244 |
| 43* | 430* | 2.5 | 60 | 13.7 | 2.70 | 238 |
| 47 | 470 | 2.5 | 55 | 13.0 | 2.75 | 235 |
| 51* | 510* | 2.5 | 55 | 12.7 | 2.85 | 231 |
| 56 | 560 | 2.5 | 55 | 12.0 | 3.00 | 225 |
| 62* | 620* | 2.5 | 55 | 11.5 | 3.15 | 220 |
| 68 | 680 | 2.5 | 55 | 11.0 | 3.30 | 215 |
| 75* | 750* | 2.5 | 55 | 10.5 | 3.70 | 203 |
| 82 | 820 | 2.5 | 50 | 10.3 | 3.90 | 200 |
| 91* | 910* | 2.5 | 50 | 10.0 | 4.30 | 188 |
| 100 | 101 | 2.5 | 50 | 9.5 | 4.50 | 185 |
| 110* | 111* | 0.79 | 60 | 8.9 | 4.90 | 176 |
| 120 | 121 | 0.79 | 65 | 8.7 | 5.20 | 170 |
| 130* | 131* | 0.79 | 65 | 8.5 | 5.45 | 167 |
| 150 | 151 | 0.79 | 65 | 8.0 | 6.05 | 160 |
| 160* | 161* | 0.79 | 65 | 7.5 | 6.40 | 154 |
| 180 | 181 | 0.79 | 65 | 7.0 | 6.75 | 150 |
| 200* | 201* | 0.79 | 65 | 6.5 | 7.10 | 147 |
| 220 | 221 | 0.79 | 65 | 6.2 | 7.45 | 144 |
| 240* | 241* | 0.79 | 65 | 5.9 | 7.80 | 140 |
| 270 | 271 | 0.79 | 65 | 5.7 | 9.00 | 131 |
| 300* | 301* | 0.79 | 65 | 5.4 | 11.50 | 118 |
| 330 | 331 | 0.79 | 65 | 5.1 | 12.50 | 111 |

Type SC10, SC15, SC30, SC55 Series

Characteristics - Electrical Type SC30

| Inductance Value - μ H | Inductance Code | Test Freq. MHz | Q Factor Min. | S.R.F. MHz Min. | Max. DC Resistance Ohms at 20°C | Direct Current at 70°C Max. mA |
|----------------------------|-----------------|----------------|---------------|-----------------|---------------------------------|--------------------------------|
| 0.022 | R022 | 50 | 33 | 1245 | 0.006 | 3000 |
| 0.027 | R027 | 50 | 33 | 1200 | 0.010 | 2800 |
| 0.033 | R033 | 50 | 33 | 1175 | 0.026 | 2620 |
| 0.039 | R039 | 50 | 33 | 1130 | 0.033 | 2320 |
| 0.047 | R047 | 50 | 33 | 1060 | 0.038 | 2170 |
| 0.056 | R056 | 50 | 33 | 990 | 0.048 | 1930 |
| 0.068 | R068 | 50 | 33 | 900 | 0.055 | 1800 |
| 0.082 | R082 | 50 | 33 | 750 | 0.065 | 1650 |
| 0.10 | R10 | 25 | 40 | 680 | 0.080 | 1490 |
| 0.12 | R12 | 25 | 40 | 640 | 0.090 | 1400 |
| 0.15 | R15 | 25 | 38 | 600 | 0.10 | 1330 |
| 0.18 | R18 | 25 | 35 | 550 | 0.12 | 1210 |
| 0.22 | R22 | 25 | 33 | 510 | 0.14 | 1120 |
| 0.27 | R27 | 25 | 33 | 430 | 0.16 | 1050 |
| 0.33 | R33 | 25 | 30 | 410 | 0.22 | 900 |
| 0.39 | R39 | 25 | 30 | 365 | 0.30 | 770 |
| 0.47 | R47 | 25 | 30 | 330 | 0.35 | 710 |
| 0.56 | R56 | 25 | 30 | 300 | 0.50 | 595 |
| 0.68 | R68 | 25 | 28 | 275 | 0.60 | 540 |
| 0.82 | R82 | 25 | 28 | 250 | 0.85 | 455 |
| 1.0 | 1R0 | 25 | 25 | 230 | 1.00 | 420 |
| 1.2 | 1R2 | 7.9 | 25 | 150 | 0.18 | 990 |
| 1.5 | 1R5 | 7.9 | 28 | 140 | 0.22 | 895 |
| 1.8 | 1R8 | 7.9 | 30 | 125 | 0.30 | 765 |
| 2.2 | 2R2 | 7.9 | 30 | 115 | 0.40 | 665 |
| 2.7 | 2R7 | 7.9 | 37 | 100 | 0.55 | 565 |
| 3.3 | 3R3 | 7.9 | 45 | 90 | 0.85 | 455 |
| 3.9 | 3R9 | 7.9 | 45 | 80 | 1.0 | 420 |
| 4.7 | 4R7 | 7.9 | 45 | 75 | 1.2 | 384 |
| 5.6 | 5R6 | 7.9 | 50 | 65 | 1.8 | 314 |
| 6.8 | 6R8 | 7.9 | 50 | 60 | 2.0 | 298 |
| 8.2 | 8R2 | 7.9 | 55 | 55 | 2.7 | 256 |
| 10 | 100 | 7.9 | 55 | 50 | 3.7 | 219 |
| 12 | 120 | 2.5 | 45 | 40 | 2.7 | 256 |
| 15 | 150 | 2.5 | 45 | 35 | 2.8 | 251 |
| 18 | 180 | 2.5 | 50 | 30 | 3.1 | 239 |
| 22 | 220 | 2.5 | 50 | 25 | 3.3 | 232 |
| 27 | 270 | 2.5 | 50 | 20 | 3.5 | 225 |
| 33 | 330 | 2.5 | 45 | 24 | 3.4 | 228 |
| 39 | 390 | 2.5 | 45 | 22 | 3.6 | 222 |
| 47 | 470 | 2.5 | 45 | 20 | 4.5 | 198 |
| 56 | 560 | 2.5 | 45 | 18 | 5.7 | 176 |
| 68 | 680 | 2.5 | 50 | 15 | 6.7 | 162 |
| 82 | 820 | 2.5 | 50 | 14 | 7.3 | 156 |
| 100 | 101 | 2.5 | 50 | 13 | 8.0 | 149 |
| 120 | 121 | 0.79 | 30 | 12 | 13.0 | 116 |
| 150 | 151 | 0.79 | 30 | 11 | 15.0 | 108 |
| 180 | 181 | 0.79 | 30 | 10 | 17.0 | 102 |
| 220 | 221 | 0.79 | 30 | 9 | 21.0 | 92 |
| 270 | 271 | 0.79 | 30 | 8 | 25.0 | 84 |
| 330 | 331 | 0.79 | 30 | 7 | 28.0 | 79 |
| 390 | 391 | 0.79 | 30 | 6.5 | 35.0 | 71 |
| 470 | 471 | 0.79 | 30 | 6 | 42.0 | 65 |
| 560 | 561 | 0.79 | 30 | 5 | 46.0 | 62 |
| 680 | 681 | 0.79 | 30 | 4 | 60.0 | 54 |
| 820 | 821 | 0.79 | 30 | 3.8 | 65.0 | 52 |
| 1000 | 102 | 0.79 | 30 | 3.4 | 72.0 | 49 |

The SC30 Series was formerly the TE Connectivity C30 Series

Type SC10, SC15, SC30, SC55 Series

Characteristics - Electrical Type SC55

| Inductance Value (μ H) | Inductance Code | Q Min. | Test Freq MHz | S.R.F. MHz Min. | Max. DC Resistance Ohms | Direct Current at 85°C Max. mA | Body Marking |
|-----------------------------|-----------------|--------|---------------|-----------------|-------------------------|--------------------------------|--------------|
| 1.0 | 1R0 | 45 | 7.9 | 190.0 | 0.04 | 2200 | 1uH0-K |
| 1.5 | 1R5 | 65 | 7.9 | 155.0 | 0.05 | 2000 | 1uH5-K |
| 2.2 | 2R2 | 60 | 7.9 | 130.0 | 0.06 | 1800 | 2uH2-K |
| 3.3 | 3R3 | 50 | 7.9 | 110.0 | 0.07 | 1700 | 3uH3-K |
| 4.7 | 4R7 | 50 | 7.9 | 95.0 | 0.12 | 1300 | 4uH7-K |
| 6.8 | 6R8 | 60 | 7.9 | 85.0 | 0.22 | 1000 | 6uH8-K |
| 10 | 100 | 50 | 7.9 | 65.0 | 0.35 | 750 | 10uH-K |
| 15 | 150 | 55 | 2.5 | 55.0 | 0.60 | 600 | 15uH-K |
| 22 | 220 | 65 | 2.5 | 45.0 | 1.10 | 430 | 22uH-K |
| 33 | 330 | 85 | 2.5 | 35.0 | 2.00 | 300 | 33uH-K |
| 47 | 470 | 70 | 2.5 | 20.0 | 2.50 | 270 | 47uH-K |
| 68 | 680 | 65 | 2.5 | 16.0 | 3.00 | 250 | 68uH-K |
| 100 | 101 | 65 | 2.5 | 14.0 | 4.00 | 220 | mH10-K |
| 150 | 151 | 80 | 0.79 | 9.5 | 5.80 | 230 | mH15-K |
| 220 | 221 | 80 | 0.79 | 8.0 | 7.30 | 200 | mH22-K |
| 330 | 331 | 80 | 0.79 | 7.5 | 12.00 | 160 | mH33-K |
| 470 | 471 | 80 | 0.79 | 6.5 | 20.00 | 120 | mH47-K |
| 680 | 681 | 85 | 0.79 | 5.0 | 24.00 | 110 | mH68-K |
| 1000 | 102 | 85 | 0.79 | 3.0 | 30.00 | 100 | 1mH0-K |

How to Order

| SC30 | 104 | K | T |
|------------------------------|---------------------------------------|------------------|-----------------------------|
| Common Part | Inductance Value | Tolerance | Packaging |
| SC10 SC15 SC30 SC55 | Please state code given in data above | K - 10% | R - Reeled T - Ammo Pack |

TE Connectivity, TE connectivity (logo) and TE (logo) are trademarks.

Other logos, product and Company names mentioned herein may be trademarks of their respective owners.

While TE has made every reasonable effort to ensure the accuracy of the information in this datasheet, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this datasheet are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.

Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



Телефон: 8 (812) 309-75-97 (многоканальный)

Факс: 8 (812) 320-03-32

Электронная почта: ocean@oceanchips.ru

Web: <http://oceanchips.ru/>

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А