

Type 160 Metallized Polyester Radial Lead Capacitors

Radial Box Metallized Polyester Capacitors



The Type 160 series radial lead metallized polyester box capacitors are constructed in rugged rectangular plastic cases with lead spacings that are standard in the electronics industry. All Type 160 capacitors are available in bulk with a .217" \pm .039" lead length, and they are good for general purpose applications such as bypass, decoupling, energy storage/discharge and arc suppression.

Highlights

- RoHS compliant
- Rugged plastic case
- Case and epoxy fill meets UL94V0
- 10 mm through 27.5 mm lead spacings
- Non-inductively wound
- Non-polar
- Wire lead material, tinned copper clad steel

Specifications

| | |
|--------------------------------------|--|
| Capacitance Range: | 0.0022 μ F to 10.0 μ F |
| Voltage Range: | 63 Vdc to 1000 Vdc |
| Capacitance Tolerance: | \pm 5%, \pm 10%, \pm 20% |
| Operating Temperature Range: | -55 $^{\circ}$ C to +105 $^{\circ}$ C (derating voltage to 1.25% per $^{\circ}$ C above 85 $^{\circ}$ C) |
| Dielectric Withstand Voltage: | 1.6 x rated voltage for 2 sec @ +25 $^{\circ}$ C \pm 5 $^{\circ}$ C |
| Dissipation Factor (DF): | $\tan\delta \times 10^{-4}$ at 25 $^{\circ}$ C \pm 5 $^{\circ}$ C |

| kHz | C \leq 1 μ F | C >1 μ F |
|-----|--------------------|--------------|
| 1 | \leq 100 | \leq 100 |
| 10 | \geq 150 | |

Total Self Inductance (L):

| Pitch (mm) | 10 | 15 | 22.5 | 27.5 |
|------------------|----|----|------|------|
| L (nH) \approx | 9 | 10 | 18 | 18 |

Long Term Stability (after two years): Capacitance change $\Delta C/C \leq \pm 3\%$ under standard environmental conditions

Corona (Partial Discharge Inception Voltage):
200 Vac for 100 Vdc, 200 Vdc
250 Vac for 400 Vdc, 630 Vdc
300 Vac for 1000 Vdc

Maximum Pulse Rise Time (dv/dt):

| Vn | Pitch (mm) | | | |
|---------|------------|-----|------|------|
| | 10 | 15 | 22.5 | 27.5 |
| 63 | 3 | 1.5 | 1 | 1 |
| 100/160 | 6/8 | 3 | 2 | 1 |
| 250 | 11 | 7 | 4 | 3 |
| 400 | 20 | 10 | 5.5 | 5 |
| 630 | 30 | 15 | 8 | 7 |
| 1000 | 60 | 25 | 15 | 10 |

If the working voltage (V) is less than the nominal voltage (Vn), the capacitor can work at higher dv/dt. In this case, the maximum value allowed is obtained by multiplying the above value with the ratio Vn/V.



Complies with the EU Directive 2002/95/EC requirement restricting the use of Lead (Pb), Mercury (Hg), Cadmium (Cd), Hexavalent chromium (Cr(VI)), PolyBrominated Biphenyls (PBB) and PolyBrominated Diphenyl Ethers (PBDE).

Type 160 Metallized Polyester Radial Lead Capacitors

Capacitor Outline Drawing

Test Method and Performance



Note: The lead diameter is a maximum dimension for lead spacing ≤ 15 mm and a nominal for lead spacing > 15 mm

| Insulation Resistance | |
|------------------------------------|--|
| Test Conditions | |
| Temperature | 25 °C ± 5 °C |
| Voltage Charge Time | 1 minute |
| Voltage Charge | 50 Vdc for $V_n < 100$ Vdc 100 Vdc for $V_n \geq 100$ Vdc |
| Performance | |
| For $V_n > 100$ Vdc | $\geq 30,000$ M Ω for $\leq 0.33\mu\text{F}$ $\geq 10,000$ M $\Omega \times \mu\text{F}$ for $C > 0.33\mu\text{F}$ |
| For $V_n \leq 100$ Vdc | $\geq 10,000$ M Ω for $C \leq 0.1\mu\text{F}$ $\geq 1,000$ M $\Omega \times \mu\text{F}$ for $\leq 0.1\mu\text{F}$ |
| Damp Heat Test | |
| Test Conditions | |
| Temperature | +40 °C |
| Relative Humidity | 95% |
| Test Duration | 21 days |
| Performance | |
| Capacitance Change $\Delta C/C$ | $\leq \pm 5\%$ |
| DF Change $\Delta \text{tg}\delta$ | $\leq 50 \times 10^{-4}$ at 1 kHz |
| Insulation Resistance | $\geq 50\%$ of limit value |
| Life Test | |
| Test Conditions | |
| Temperature | +85 °C |
| Test Duration | 1000 hrs |
| Voltage Applied | 1.25 x V_n |
| Performance | |
| Capacitance Change $\Delta C/C$ | $\leq \pm 5\%$ |
| DF Change $\Delta \text{tg}\delta$ | $\leq 30 \times 10^{-4}$ at 10 kHz for $C \leq 1.0 \mu\text{F}$ $\leq 20 \times 10^{-4}$ at 1 kHz for $C > 1.0 \mu\text{F}$ |
| Insulation Resistance | $\geq 50\%$ of limit value |

| Soldering | |
|------------------------------------|--|
| Test Conditions | |
| Soldering Temperature | 260 °C ± 5 °C |
| Soldering Duration | 10 sec ± 1 sec |
| Performance | |
| Capacitance Change $\Delta C/C$ | $\leq \pm 2\%$ |
| DF Change $\Delta \text{tg}\delta$ | $\leq 30 \times 10^{-4}$ at 10 kHz for $C \leq 1.0 \mu\text{F}$ $\leq 20 \times 10^{-4}$ at 1 kHz for $C > 1.0 \mu\text{F}$ |

Ratings

RoHS Compliant

| Cap (μF) | Catalog Part Number | Inches | | | | | Millimeters | | | | |
|--------------------------|------------------------|--------|-------|-------|-------|-----------------|-------------|------|------|------|-----------------|
| | | L | T | H | S | $\varnothing d$ | L | T | H | S | $\varnothing d$ |
| 63 Vdc | | | | | | | | | | | |
| .22 | 160224*63D-F | 0.512 | 0.157 | 0.374 | 0.394 | 0.031 | 13.0 | 5.0 | 11.0 | 10.0 | 0.8 |
| .27 | 160274*63D-F | 0.512 | 0.157 | 0.374 | 0.394 | 0.031 | 13.0 | 5.0 | 11.0 | 10.0 | 0.8 |
| .33 | 160334*63E-F | 0.512 | 0.157 | 0.374 | 0.394 | 0.031 | 13.0 | 6.0 | 12.0 | 10.0 | 0.8 |
| .39 | 160394*63E-F | 0.512 | 0.157 | 0.374 | 0.394 | 0.031 | 13.0 | 6.0 | 12.0 | 10.0 | 0.8 |
| .47 | 160474*63E-F | 0.512 | 0.197 | 0.433 | 0.394 | 0.031 | 13.0 | 6.0 | 12.0 | 10.0 | 0.8 |
| .56 | 160564*63D-F | 0.512 | 0.197 | 0.433 | 0.394 | 0.031 | 13.0 | 5.0 | 11.0 | 10.0 | 0.8 |
| .68 | 160684*63D-F | 0.512 | 0.197 | 0.433 | 0.394 | 0.031 | 13.0 | 5.0 | 11.0 | 10.0 | 0.8 |
| .68 | 160684*63G-F | 0.709 | 0.236 | 0.472 | 0.591 | 0.031 | 18.0 | 6.0 | 12.0 | 15.0 | 0.8 |
| .82 | 160824*63E-F | 0.512 | 0.236 | 0.472 | 0.394 | 0.031 | 13.0 | 6.0 | 12.0 | 10.0 | 0.8 |
| .82 | 160824*63H-F | 0.709 | 0.197 | 0.433 | 0.591 | 0.031 | 18.0 | 7.5 | 13.5 | 15.0 | 0.8 |
| 1.0 | 160105*63H-F | 0.709 | 0.197 | 0.433 | 0.591 | 0.031 | 18.0 | 7.5 | 13.5 | 15.0 | 0.8 |
| 1.5 | 160155*63G-F | 0.709 | 0.236 | 0.472 | 0.591 | 0.031 | 18.0 | 6.0 | 12.5 | 15.0 | 0.8 |
| 2.2 | 160225*63H-F | 0.709 | 0.295 | 0.531 | 0.591 | 0.031 | 18.0 | 7.5 | 14.0 | 15.0 | 0.8 |
| 3.3 | 160335*63M-F | 1.043 | 0.276 | 0.650 | 0.886 | 0.031 | 18.0 | 10.0 | 16.0 | 15.0 | 0.8 |
| 4.7 | 160475*63N-F | 1.043 | 0.335 | 0.669 | 0.886 | 0.031 | 26.5 | 8.5 | 17.0 | 22.5 | 0.8 |
| 6.8 | 160685*63O-F | 1.043 | 0.394 | 0.748 | 0.886 | 0.031 | 26.5 | 10.0 | 19.0 | 22.5 | 0.8 |
| 10.0 | 160106*63P-F | 1.260 | 0.433 | 0.787 | 1.083 | 0.031 | 26.5 | 13.0 | 23.0 | 22.5 | 0.8 |

* Indicates capacitance tolerance: J = $\pm 5\%$, K = $\pm 10\%$, M = $\pm 20\%$

Type 160 Metallized Polyester Radial Lead Capacitors

RoHS Compliant

| Cap (μ F) | Catalog Part Number | Inches | | | | | Millimeters | | | | |
|-------------------|------------------------|--------|-------|-------|-------|-----------------|-------------|------|------|------|-----------------|
| | | L | T | H | S | \varnothing d | L | T | H | S | \varnothing d |
| 100 Vdc | | | | | | | | | | | |
| .10 | 160104*100C-F | 0.512 | 0.157 | 0.374 | 0.394 | 0.031 | 13.0 | 4.0 | 9.5 | 10.0 | 0.8 |
| .12 | 160124*100C-F | 0.512 | 0.157 | 0.374 | 0.394 | 0.031 | 13.0 | 4.0 | 9.5 | 10.0 | 0.8 |
| .15 | 160154*100C-F | 0.512 | 0.157 | 0.374 | 0.394 | 0.031 | 13.0 | 4.0 | 9.5 | 10.0 | 0.8 |
| .18 | 160184*100C-F | 0.512 | 0.157 | 0.374 | 0.394 | 0.031 | 13.0 | 4.0 | 9.5 | 10.0 | 0.8 |
| .22 | 160224*100D-F | 0.512 | 0.197 | 0.433 | 0.394 | 0.031 | 13.0 | 5.0 | 11.0 | 10.0 | 0.8 |
| .27 | 160274*100D-F | 0.512 | 0.197 | 0.433 | 0.394 | 0.031 | 13.0 | 5.0 | 11.0 | 10.0 | 0.8 |
| .33 | 160334*100E-F | 0.512 | 0.236 | 0.472 | 0.394 | 0.031 | 13.0 | 6.0 | 12.0 | 10.0 | 0.8 |
| .33 | 160334*100F-F | 0.709 | 0.197 | 0.433 | 0.591 | 0.031 | 18.0 | 5.0 | 11.0 | 15.0 | 0.8 |
| .39 | 160394*100E-F | 0.512 | 0.236 | 0.472 | 0.394 | 0.031 | 13.0 | 6.0 | 12.0 | 10.0 | 0.8 |
| .39 | 160394*100F-F | 0.709 | 0.197 | 0.433 | 0.591 | 0.031 | 18.0 | 5.0 | 11.0 | 15.0 | 0.8 |
| .47 | 160474*100E-F | 0.512 | 0.236 | 0.472 | 0.394 | 0.031 | 13.0 | 6.0 | 12.0 | 10.0 | 0.8 |
| .47 | 160474*100F-F | 0.709 | 0.197 | 0.433 | 0.591 | 0.031 | 18.0 | 5.0 | 11.0 | 15.0 | 0.8 |
| .56 | 160564*100G-F | 0.709 | 0.236 | 0.472 | 0.591 | 0.031 | 18.0 | 6.0 | 12.0 | 15.0 | 0.8 |
| .68 | 160684*100G-F | 0.709 | 0.236 | 0.472 | 0.591 | 0.031 | 18.0 | 6.0 | 12.0 | 15.0 | 0.8 |
| .82 | 160824*100H-F | 0.709 | 0.295 | 0.531 | 0.591 | 0.031 | 18.0 | 7.5 | 13.5 | 15.0 | 0.8 |
| 1.0 | 160105*100H-F | 0.709 | 0.295 | 0.531 | 0.591 | 0.031 | 18.0 | 7.5 | 13.5 | 15.0 | 0.8 |
| 1.5 | 160155*100M-F | 1.043 | 0.276 | 0.650 | 0.886 | 0.031 | 26.5 | 7.0 | 16.5 | 22.5 | 0.8 |
| 2.2 | 160225*100N-F | 1.043 | 0.335 | 0.669 | 0.886 | 0.031 | 26.5 | 8.5 | 17.0 | 22.5 | 0.8 |
| 3.3 | 160335*100O-F | 1.043 | 0.394 | 0.748 | 0.886 | 0.031 | 26.5 | 10.0 | 19.0 | 22.5 | 0.8 |
| 4.7 | 160475*100P-F | 1.260 | 0.433 | 0.787 | 1.083 | 0.031 | 32.0 | 11.0 | 20.0 | 27.5 | 0.8 |
| 6.8 | 160685*100Q-F | 1.260 | 0.512 | 0.886 | 1.083 | 0.031 | 32.0 | 13.0 | 22.5 | 27.5 | 0.8 |
| 10.0 | 160106*100S-F | 1.457 | 0.709 | 1.299 | 1.083 | 0.031 | 37.0 | 18.0 | 33.0 | 27.5 | 0.8 |
| 160 Vdc | | | | | | | | | | | |
| .10 | 160104*160C-F | 0.512 | 0.157 | 0.374 | 0.394 | 0.031 | 13.0 | 4.0 | 9.5 | 10.0 | 0.8 |
| 250 Vdc | | | | | | | | | | | |
| .033 | 160333*250C-F | 0.512 | 0.157 | 0.374 | 0.394 | 0.031 | 13.0 | 4.0 | 9.5 | 10.0 | 0.8 |
| .039 | 160393*250C-F | 0.512 | 0.157 | 0.374 | 0.394 | 0.031 | 13.0 | 4.0 | 9.5 | 10.0 | 0.8 |
| .047 | 160473*250C-F | 0.512 | 0.157 | 0.374 | 0.394 | 0.031 | 13.0 | 4.0 | 9.5 | 10.0 | 0.8 |
| .056 | 160563*250C-F | 0.512 | 0.157 | 0.374 | 0.394 | 0.031 | 13.0 | 4.0 | 9.5 | 10.0 | 0.8 |
| .068 | 160683*250C-F | 0.512 | 0.157 | 0.374 | 0.394 | 0.031 | 13.0 | 4.0 | 9.5 | 10.0 | 0.8 |
| .082 | 160823*250D-F | 0.512 | 0.197 | 0.433 | 0.394 | 0.031 | 13.0 | 5.0 | 11.0 | 10.0 | 0.8 |
| .10 | 160104*250D-F | 0.512 | 0.197 | 0.433 | 0.394 | 0.031 | 13.0 | 5.0 | 11.0 | 10.0 | 0.8 |
| .10 | 160104*250F-F | 0.709 | 0.197 | 0.433 | 0.591 | 0.031 | 18.0 | 5.0 | 11.0 | 15.0 | 0.8 |
| .12 | 160124*250D-F | 0.512 | 0.236 | 0.472 | 0.394 | 0.031 | 13.0 | 6.0 | 12.0 | 10.0 | 0.8 |
| .12 | 160124*250F-F | 0.709 | 0.197 | 0.433 | 0.591 | 0.031 | 18.0 | 5.0 | 11.0 | 15.0 | 0.8 |
| .15 | 160154*250E-F | 0.512 | 0.236 | 0.472 | 0.394 | 0.031 | 13.0 | 6.0 | 12.0 | 10.0 | 0.8 |
| .15 | 160154*250F-F | 0.709 | 0.197 | 0.433 | 0.591 | 0.031 | 18.0 | 5.0 | 11.0 | 15.0 | 0.8 |
| .18 | 160184*250E-F | 0.512 | 0.236 | 0.472 | 0.394 | 0.031 | 13.0 | 6.0 | 12.0 | 10.0 | 0.8 |
| .18 | 160184*250F-F | 0.709 | 0.197 | 0.433 | 0.591 | 0.031 | 18.0 | 5.0 | 11.0 | 15.0 | 0.8 |
| .22 | 160224*250F-F | 0.709 | 0.197 | 0.433 | 0.591 | 0.031 | 18.0 | 5.0 | 11.0 | 15.0 | 0.8 |
| .27 | 160274*250G-F | 0.709 | 0.236 | 0.472 | 0.591 | 0.031 | 18.0 | 6.0 | 12.0 | 15.0 | 0.8 |
| .33 | 160334*250G-F | 0.709 | 0.236 | 0.472 | 0.591 | 0.031 | 18.0 | 6.0 | 12.0 | 15.0 | 0.8 |
| .39 | 160394*250H-F | 0.709 | 0.295 | 0.531 | 0.591 | 0.031 | 18.0 | 7.5 | 13.5 | 15.0 | 0.8 |
| .47 | 160474*250H-F | 0.709 | 0.295 | 0.531 | 0.591 | 0.031 | 18.0 | 7.5 | 13.5 | 15.0 | 0.8 |
| .47 | 160474*250L-F | 1.043 | 0.236 | 0.591 | 0.886 | 0.031 | 26.5 | 6.0 | 15.0 | 22.5 | 0.8 |
| .56 | 160564*250I-F | 0.709 | 0.335 | 0.571 | 0.591 | 0.031 | 18.0 | 8.5 | 14.5 | 15.0 | 0.8 |
| .56 | 160564*250M-F | 1.043 | 0.276 | 0.650 | 0.886 | 0.031 | 26.5 | 7.0 | 16.5 | 22.5 | 0.8 |
| .68 | 160684*250I-F | 0.709 | 0.335 | 0.571 | 0.591 | 0.031 | 18.0 | 8.5 | 14.5 | 15.0 | 0.8 |
| .68 | 160684*250M-F | 1.043 | 0.276 | 0.650 | 0.886 | 0.031 | 26.5 | 7.0 | 16.5 | 22.5 | 0.8 |
| .82 | 160824*250M-F | 1.043 | 0.335 | 0.669 | 0.886 | 0.031 | 26.5 | 8.5 | 17.0 | 22.5 | 0.8 |

* Indicates capacitance tolerance: J = $\pm 5\%$, K = $\pm 10\%$, M = $\pm 20\%$

Type 160 Metallized Polyester Radial Lead Capacitors

RoHS Compliant

| Cap (μ F) | Catalog Part Number | Inches | | | | | Millimeters | | | | |
|-------------------|------------------------|--------|-------|-------|-------|-----------------|-------------|------|------|------|-----------------|
| | | L | T | H | S | \varnothing d | L | T | H | S | \varnothing d |
| 250 Vdc | | | | | | | | | | | |
| 1.0 | 160105*250N-F | 1.043 | 0.335 | 0.669 | 0.886 | 0.031 | 26.5 | 8.5 | 17.0 | 22.5 | 0.8 |
| 1.5 | 160155*250O-F | 1.043 | 0.394 | 0.748 | 0.886 | 0.031 | 26.5 | 10.0 | 19.0 | 22.5 | 0.8 |
| 2.2 | 160225*250P-F | 1.260 | 0.433 | 0.787 | 1.083 | 0.031 | 32.0 | 11.0 | 20.0 | 27.5 | 0.8 |
| 3.3 | 160335*250Q-F | 1.260 | 0.512 | 0.886 | 1.083 | 0.031 | 32.0 | 13.0 | 22.5 | 27.5 | 0.8 |
| 4.7 | 160475*250R-F | 1.260 | 0.591 | 1.181 | 1.083 | 0.031 | 32.0 | 15.0 | 30.0 | 27.5 | 0.8 |
| 6.8 | 160685*250S-F | 1.457 | 0.709 | 1.299 | 1.083 | 0.031 | 37.0 | 18.0 | 33.0 | 27.5 | 0.8 |
| 400 Vdc | | | | | | | | | | | |
| .012 | 160123*400C-F | 0.512 | 0.157 | 0.374 | 0.394 | 0.031 | 13.0 | 4.0 | 9.5 | 10.0 | 0.8 |
| .015 | 160153*400C-F | 0.512 | 0.157 | 0.374 | 0.394 | 0.031 | 13.0 | 4.0 | 9.5 | 10.0 | 0.8 |
| .018 | 160183*400C-F | 0.512 | 0.157 | 0.374 | 0.394 | 0.031 | 13.0 | 4.0 | 9.5 | 10.0 | 0.8 |
| .022 | 160223*400C-F | 0.512 | 0.157 | 0.374 | 0.394 | 0.031 | 13.0 | 4.0 | 9.5 | 10.0 | 0.8 |
| .027 | 160273*400C-F | 0.512 | 0.157 | 0.374 | 0.394 | 0.031 | 13.0 | 4.0 | 9.5 | 10.0 | 0.8 |
| .033 | 160333*400D-F | 0.512 | 0.197 | 0.433 | 0.394 | 0.031 | 13.0 | 5.0 | 11.0 | 10.0 | 0.8 |
| .039 | 160393*400D-F | 0.512 | 0.197 | 0.433 | 0.394 | 0.031 | 13.0 | 5.0 | 11.0 | 10.0 | 0.8 |
| .047 | 160473*400E-F | 0.512 | 0.236 | 0.472 | 0.394 | 0.031 | 13.0 | 6.0 | 12.0 | 10.0 | 0.8 |
| .047 | 160473*400F-F | 0.709 | 0.197 | 0.433 | 0.591 | 0.031 | 18.0 | 5.0 | 11.0 | 15.0 | 0.8 |
| .056 | 160563*400F-F | 0.709 | 0.197 | 0.433 | 0.591 | 0.031 | 18.0 | 5.0 | 11.0 | 15.0 | 0.8 |
| .068 | 160683*400F-F | 0.709 | 0.197 | 0.433 | 0.591 | 0.031 | 18.0 | 5.0 | 11.0 | 15.0 | 0.8 |
| .082 | 160823*400F-F | 0.709 | 0.197 | 0.433 | 0.591 | 0.031 | 18.0 | 5.0 | 11.0 | 15.0 | 0.8 |
| .10 | 160104*400G-F | 0.709 | 0.236 | 0.472 | 0.591 | 0.031 | 18.0 | 6.0 | 12.0 | 15.0 | 0.8 |
| .12 | 160124*400G-F | 0.709 | 0.236 | 0.472 | 0.591 | 0.031 | 18.0 | 6.0 | 12.0 | 15.0 | 0.8 |
| .15 | 160154*400H-F | 0.709 | 0.295 | 0.531 | 0.591 | 0.031 | 18.0 | 7.5 | 13.5 | 15.0 | 0.8 |
| .15 | 160154*400L-F | 1.043 | 0.236 | 0.591 | 0.886 | 0.031 | 26.5 | 6.0 | 15.0 | 22.5 | 0.8 |
| .18 | 160184*400L-F | 1.043 | 0.236 | 0.591 | 0.886 | 0.031 | 26.5 | 6.0 | 15.0 | 22.5 | 0.8 |
| .22 | 160224*400L-F | 1.043 | 0.236 | 0.591 | 0.886 | 0.031 | 26.5 | 6.0 | 15.0 | 22.5 | 0.8 |
| .27 | 160274*400M-F | 1.043 | 0.276 | 0.650 | 0.886 | 0.031 | 26.5 | 7.0 | 16.5 | 22.5 | 0.8 |
| .33 | 160334*400M-F | 1.043 | 0.276 | 0.650 | 0.886 | 0.031 | 26.5 | 7.0 | 16.5 | 22.5 | 0.8 |
| .39 | 160394*400N-F | 1.043 | 0.335 | 0.669 | 0.886 | 0.031 | 26.5 | 8.5 | 17.0 | 22.5 | 0.8 |
| .47 | 160474*400N-F | 1.043 | 0.335 | 0.669 | 0.886 | 0.031 | 26.5 | 8.5 | 17.0 | 22.5 | 0.8 |
| .56 | 160564*400O-F | 1.043 | 0.394 | 0.748 | 0.886 | 0.031 | 26.5 | 10.0 | 19.0 | 22.5 | 0.8 |
| .68 | 160684*400P-F | 1.260 | 0.433 | 0.787 | 1.083 | 0.031 | 32.0 | 11.0 | 20.0 | 27.5 | 0.8 |
| .82 | 160824*400P-F | 1.260 | 0.433 | 0.787 | 1.083 | 0.031 | 32.0 | 11.0 | 20.0 | 27.5 | 0.8 |
| 1.0 | 160105*400P-F | 1.260 | 0.433 | 0.787 | 1.083 | 0.031 | 32.0 | 11.0 | 20.0 | 27.5 | 0.8 |
| 1.0 | 160105*400Q-F | 1.260 | 0.512 | 0.886 | 1.083 | 0.031 | 32.0 | 13.0 | 22.5 | 27.5 | 0.8 |
| 630 Vdc | | | | | | | | | | | |
| .0039 | 160392*630C-F | 0.512 | 0.157 | 0.374 | 0.394 | 0.031 | 13.0 | 4.0 | 9.5 | 10.0 | 0.8 |
| .0047 | 160472*630C-F | 0.512 | 0.157 | 0.374 | 0.394 | 0.031 | 13.0 | 4.0 | 9.5 | 10.0 | 0.8 |
| .0056 | 160562*630C-F | 0.512 | 0.157 | 0.374 | 0.394 | 0.031 | 13.0 | 4.0 | 9.5 | 10.0 | 0.8 |
| .0068 | 160682*630C-F | 0.512 | 0.157 | 0.374 | 0.394 | 0.031 | 13.0 | 4.0 | 9.5 | 10.0 | 0.8 |
| .0082 | 160822*630C-F | 0.512 | 0.157 | 0.374 | 0.394 | 0.031 | 13.0 | 4.0 | 9.5 | 10.0 | 0.8 |
| .010 | 160103*630C-F | 0.512 | 0.157 | 0.374 | 0.394 | 0.031 | 13.0 | 4.0 | 9.5 | 10.0 | 0.8 |
| .012 | 160123*630D-F | 0.512 | 0.197 | 0.433 | 0.394 | 0.031 | 13.0 | 5.0 | 11.0 | 10.0 | 0.8 |
| .015 | 160153*630D-F | 0.512 | 0.197 | 0.433 | 0.394 | 0.031 | 13.0 | 5.0 | 11.0 | 10.0 | 0.8 |
| .018 | 160183*630D-F | 0.512 | 0.197 | 0.433 | 0.394 | 0.031 | 13.0 | 5.0 | 11.0 | 10.0 | 0.8 |
| .022 | 160223*630E-F | 0.512 | 0.236 | 0.472 | 0.394 | 0.031 | 13.0 | 6.0 | 12.0 | 10.0 | 0.8 |
| .027 | 160273*630F-F | 0.709 | 0.197 | 0.433 | 0.591 | 0.031 | 18.0 | 5.0 | 11.0 | 15.0 | 0.8 |
| .033 | 160333*630F-F | 0.709 | 0.197 | 0.433 | 0.591 | 0.031 | 18.0 | 5.0 | 11.0 | 15.0 | 0.8 |
| .039 | 160393*630G-F | 0.709 | 0.236 | 0.472 | 0.591 | 0.031 | 18.0 | 6.0 | 12.0 | 15.0 | 0.8 |
| .047 | 160473*630G-F | 0.709 | 0.236 | 0.472 | 0.591 | 0.031 | 18.0 | 6.0 | 12.0 | 15.0 | 0.8 |
| .056 | 160563*630G-F | 0.709 | 0.236 | 0.472 | 0.591 | 0.031 | 18.0 | 6.0 | 12.0 | 15.0 | 0.8 |

* Indicates capacitance tolerance: J = \pm 5%, K = \pm 10%, M = \pm 20%

Type 160 Metallized Polyester Radial Lead Capacitors

RoHS Compliant

| Cap (μ F) | Catalog Part Number | Inches | | | | | Millimeters | | | | |
|-------------------|------------------------|--------|-------|-------|-------|---------------|-------------|------|------|------|---------------|
| | | L | T | H | S | \emptyset d | L | T | H | S | \emptyset d |
| 630 Vdc | | | | | | | | | | | |
| .068 | 160683*630H-F | 0.709 | 0.295 | 0.531 | 0.591 | 0.031 | 18.0 | 7.5 | 13.5 | 15.0 | 0.8 |
| .068 | 160683*630L-F | 1.043 | 0.236 | 0.591 | 0.886 | 0.031 | 26.5 | 6.0 | 15.0 | 22.5 | 0.8 |
| .082 | 160823*630L-F | 1.043 | 0.236 | 0.591 | 0.886 | 0.031 | 26.5 | 6.0 | 15.0 | 22.5 | 0.8 |
| .10 | 160104*630L-F | 1.043 | 0.236 | 0.591 | 0.886 | 0.031 | 26.5 | 6.0 | 15.0 | 22.5 | 0.8 |
| .12 | 160124*630M-F | 1.043 | 0.276 | 0.650 | 0.886 | 0.031 | 26.5 | 7.0 | 16.5 | 22.5 | 0.8 |
| .15 | 160154*630M-F | 1.043 | 0.276 | 0.650 | 0.886 | 0.031 | 26.5 | 7.0 | 16.5 | 22.5 | 0.8 |
| .18 | 160184*630N-F | 1.043 | 0.335 | 0.669 | 0.886 | 0.031 | 26.5 | 8.5 | 17.0 | 22.5 | 0.8 |
| .22 | 160224*630N-F | 1.043 | 0.335 | 0.669 | 0.886 | 0.031 | 26.5 | 8.5 | 17.0 | 22.5 | 0.8 |
| .27 | 160274*630Q-F | 1.260 | 0.512 | 0.886 | 1.083 | 0.031 | 32.0 | 13.0 | 22.5 | 27.5 | 0.8 |
| .33 | 160334*630P-F | 1.260 | 0.433 | 0.787 | 1.083 | 0.031 | 32.0 | 11.0 | 20.0 | 27.5 | 0.8 |
| .39 | 160394*630P-F | 1.260 | 0.433 | 0.787 | 1.083 | 0.031 | 32.0 | 11.0 | 20.0 | 27.5 | 0.8 |
| .47 | 160474*630Q-F | 1.260 | 0.512 | 0.886 | 1.083 | 0.031 | 32.0 | 13.0 | 22.5 | 27.5 | 0.8 |
| 1000 Vdc | | | | | | | | | | | |
| .0022 | 160222*1000C-F | 0.512 | 0.157 | 0.374 | 0.394 | 0.031 | 13.0 | 4.0 | 9.5 | 10.0 | 0.8 |
| .0027 | 160272*1000C-F | 0.512 | 0.157 | 0.374 | 0.394 | 0.031 | 13.0 | 4.0 | 9.5 | 10.0 | 0.8 |
| .0033 | 160332*1000C-F | 0.512 | 0.157 | 0.374 | 0.394 | 0.031 | 13.0 | 4.0 | 9.5 | 10.0 | 0.8 |
| .0039 | 160392*1000D-F | 0.512 | 0.197 | 0.433 | 0.394 | 0.031 | 13.0 | 5.0 | 11.0 | 10.0 | 0.8 |
| .0047 | 160472*1000D-F | 0.512 | 0.197 | 0.433 | 0.394 | 0.031 | 13.0 | 5.0 | 11.0 | 10.0 | 0.8 |
| .0056 | 160562*1000D-F | 0.512 | 0.197 | 0.433 | 0.394 | 0.031 | 13.0 | 5.0 | 11.0 | 10.0 | 0.8 |
| .0068 | 160682*1000D-F | 0.512 | 0.197 | 0.433 | 0.394 | 0.031 | 13.0 | 5.0 | 11.0 | 10.0 | 0.8 |
| .0082 | 160822*1000D-F | 0.512 | 0.197 | 0.433 | 0.394 | 0.031 | 13.0 | 5.0 | 11.0 | 10.0 | 0.8 |
| .010 | 160103*1000F-F | 0.709 | 0.197 | 0.433 | 0.591 | 0.031 | 18.0 | 5.0 | 11.0 | 15.0 | 0.8 |
| .012 | 160123*1000F-F | 0.709 | 0.197 | 0.433 | 0.591 | 0.031 | 18.0 | 5.0 | 11.0 | 15.0 | 0.8 |
| .015 | 160153*1000F-F | 0.709 | 0.236 | 0.472 | 0.591 | 0.031 | 18.0 | 6.0 | 12.0 | 15.0 | 0.8 |
| .018 | 160183*1000G-F | 0.709 | 0.236 | 0.472 | 0.591 | 0.031 | 18.0 | 6.0 | 12.0 | 15.0 | 0.8 |
| .022 | 160223*1000G-F | 0.709 | 0.236 | 0.472 | 0.591 | 0.031 | 18.0 | 6.0 | 12.0 | 15.0 | 0.8 |
| .027 | 160273*1000H-F | 0.709 | 0.295 | 0.531 | 0.591 | 0.031 | 18.0 | 7.5 | 13.5 | 15.0 | 0.8 |
| .033 | 160333*1000L-F | 1.043 | 0.236 | 0.591 | 0.886 | 0.031 | 26.5 | 6.0 | 15.0 | 22.5 | 0.8 |
| .039 | 160393*1000L-F | 1.043 | 0.236 | 0.591 | 0.886 | 0.031 | 26.5 | 6.0 | 15.0 | 22.5 | 0.8 |
| .047 | 160473*1000L-F | 1.043 | 0.236 | 0.591 | 0.886 | 0.031 | 26.5 | 6.0 | 15.0 | 22.5 | 0.8 |
| .056 | 160563*1000M-F | 1.043 | 0.276 | 0.650 | 0.886 | 0.031 | 26.5 | 7.0 | 16.5 | 22.5 | 0.8 |
| .068 | 160683*1000M-F | 1.043 | 0.276 | 0.650 | 0.886 | 0.031 | 26.5 | 7.0 | 16.5 | 22.5 | 0.8 |
| .082 | 160823*1000N-F | 1.043 | 0.335 | 0.669 | 0.886 | 0.031 | 26.5 | 8.5 | 17.0 | 22.5 | 0.8 |
| .10 | 160104*1000N-F | 1.043 | 0.335 | 0.669 | 0.886 | 0.031 | 26.5 | 8.5 | 17.0 | 22.5 | 0.8 |
| .12 | 160124*1000O-F | 1.043 | 0.394 | 0.748 | 0.886 | 0.031 | 26.5 | 10.0 | 19.0 | 22.5 | 0.8 |
| .15 | 160154*1000P-F | 1.260 | 0.433 | 0.787 | 1.083 | 0.031 | 32.0 | 11.0 | 20.0 | 27.5 | 0.8 |
| .18 | 160184*1000Q-F | 1.260 | 0.512 | 0.886 | 1.083 | 0.031 | 32.0 | 13.0 | 22.5 | 27.5 | 0.8 |
| .22 | 160224*1000Q-F | 1.260 | 0.512 | 0.886 | 1.083 | 0.031 | 32.0 | 13.0 | 22.5 | 27.5 | 0.8 |

* Indicates capacitance tolerance: J = \pm 5%, K = \pm 10%, M = \pm 20%

Part Numbering System

| | | | | | |
|---------------|---------------------|------------------|-----------------|------------------|-----------------------|
| 160 | 104 | K | 100 | C | -F |
| | | | | | |
| Series | Capacitance | Tolerance | Voltage | Case Code | ROHS Compliant |
| 160 | 392 = .0039 μ F | J = \pm 5% | 100 = 100 Vdc | C | |
| | 103 = .01 μ F | K = \pm 10% | 250 = 250 Vdc | D | |
| | 104 = .1 μ F | M = \pm 20% | 630 = 630 Vdc | E | |
| | 105 = 1.0 μ F | | 1000 = 1000 Vdc | F | |
| | | | | etc. | |

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