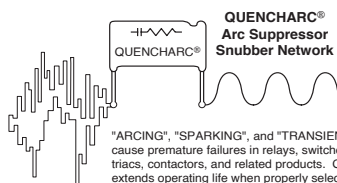
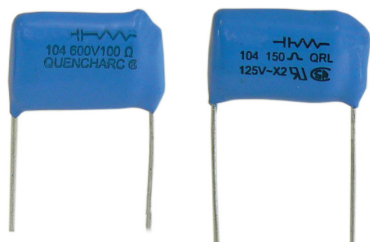


Type Q/QRL (Quencharc®) Arc Suppressor/Snubber Network

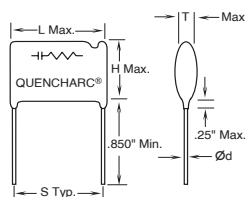
Radial Metallized Polyester RC Network for Transient Suppression



Highlights

- ◆ Noise and arc suppression
- ◆ RC Snubber Network
- ◆ Relay contact protection
- ◆ Noise reduction on controllers and drives
- ◆ EMI/RFI reduction
- ◆ dv/dt suppression
- ◆ Type QRL - UL/CSA version
- ◆ Coated with flame retardant epoxy
- ◆ Halogen-free (date codes 1807 and after)

Outline Dimensions



Specifications

| | |
|------------------------------|--|
| Capacitance Range | 0.10 µF, 0.25 µF, 0.50 µF, 1.0 µF |
| Capacitance Tolerance | ±20% |
| Rated Voltage | 200 Vdc/125 Vac, 60 Hz thru 1600 Vdc/660 Vac, 60 Hz |
| Resistor Tolerance | ±10% |
| Resistor Values | 22, 39, 47, 100, 150, 220, 330, 680 ohms |
| Operating Temperature Range | -55 °C to +85 °C at full rated voltage |
| Construction | Metallized polyester in series with a carbon composition resistor ¹ |
| Dielectric Withstand Voltage | 1.6 x DC rated voltage @ +25 °C |
| DC Life Test | 125% of rated voltage for a period of 500 hours at 85 °C with capacitance change ≤5% and DF ≤ original limits |
| Long Term Stability | The capacitance shall not change more than 2% when stored at ambient temperature and humidity for a period of two years or less. |

[Regulatory Information](#)

Ratings

| Catalog Part Number | Cap (µF) | Resistor Ohms Watts | Dimensions in Inches | | | | | | Dimensions in Millimeters | | | | | |
|-------------------------|----------|---------------------|----------------------|-------|-------|--------|---------------------|---------------------|---------------------------|-------|-------|--------|---------------------|---------------------|
| | | | L Max | T Max | H Max | S Typ. | Ø _d Typ. | Ø _d Typ. | L Max | T Max | H Max | S Typ. | Ø _d Typ. | Ø _d Typ. |
| 200 Vdc / 125Vac | | | | | | | | | | | | | | |
| 504M02QA22 | 0.5 | 22 1/2 | 1.08 | 0.37 | 0.64 | 0.82 | 0.032 | 0.025 | 27.4 | 9.4 | 16.3 | 20.8 | 0.8 | 0.635 |
| 504M02QA47 | 0.5 | 47 1/2 | 1.08 | 0.37 | 0.64 | 0.82 | 0.032 | 0.025 | 27.4 | 9.4 | 16.3 | 20.8 | 0.8 | 0.635 |
| 504M02QA100 | 0.5 | 100 1/2 | 1.08 | 0.37 | 0.64 | 0.82 | 0.032 | 0.025 | 27.4 | 9.4 | 16.3 | 20.8 | 0.8 | 0.635 |
| 504M02QA220 | 0.5 | 220 1/2 | 1.08 | 0.37 | 0.64 | 0.82 | 0.032 | 0.025 | 27.4 | 9.4 | 16.3 | 20.8 | 0.8 | 0.635 |
| 105M02QB22 | 1.0 | 22 1/2 | 1.45 | 0.39 | 0.66 | 1.20 | 0.032 | 0.025 | 36.8 | 9.9 | 16.7 | 30.5 | 0.8 | 0.635 |
| 105M02QB47 | 1.0 | 47 1/2 | 1.45 | 0.39 | 0.66 | 1.20 | 0.032 | 0.025 | 36.8 | 9.9 | 16.7 | 30.5 | 0.8 | 0.635 |
| 600 Vdc / 250Vac | | | | | | | | | | | | | | |
| 104M06QC22 | 0.1 | 22 1/2 | 1.08 | 0.39 | 0.66 | 0.82 | 0.032 | 0.025 | 27.4 | 9.9 | 16.7 | 20.8 | 0.8 | 0.635 |
| 104M06QC47 | 0.1 | 47 1/2 | 1.08 | 0.39 | 0.66 | 0.82 | 0.032 | 0.025 | 27.4 | 9.9 | 16.7 | 20.8 | 0.8 | 0.635 |
| 104M06QC100 | 0.1 | 100 1/2 | 1.08 | 0.39 | 0.66 | 0.82 | 0.032 | 0.025 | 27.4 | 9.9 | 16.7 | 20.8 | 0.8 | 0.635 |
| 104M06QC150 | 0.1 | 150 1/2 | 1.08 | 0.39 | 0.66 | 0.82 | 0.032 | 0.025 | 27.4 | 9.9 | 16.7 | 20.8 | 0.8 | 0.635 |
| 104M06QC220 | 0.1 | 220 1/2 | 1.08 | 0.39 | 0.66 | 0.82 | 0.032 | 0.025 | 27.4 | 9.9 | 16.7 | 20.8 | 0.8 | 0.635 |
| 104M06QC330 | 0.1 | 330 1/2 | 1.08 | 0.39 | 0.66 | 0.82 | 0.032 | 0.025 | 27.4 | 9.9 | 16.7 | 20.8 | 0.8 | 0.635 |

Type QRL: UL File No. E33628, CSA File No. LR32208

Type Q/QRL (Quencharc®) Arc Suppressor/Snubber Network

Ratings

| Catalog Part Number | Cap (µF) | Resistor Ohms Watts | | Dimensions in Inches | | | | | | Dimensions in Millimeters | | | | | |
|--|----------|------------------------|-----|----------------------|------|------|------|-----------------|-----------------|---------------------------|-------|------|------|-----------------|-----------------|
| | | | | L | T | H | S | Ød _c | Ød _r | L | T | H | S | Ød _c | Ød _r |
| | | | | Max | Max | Max | Typ. | Typ. | Typ. | Max | Max | Max | Typ. | Typ. | Typ. |
| 600 Vdc / 250Vac | | | | | | | | | | | | | | | |
| 254M06QD22 | 0.25 | 22 | 1/2 | 1.45 | 0.42 | 0.75 | 1.20 | 0.032 | 0.025 | 36.8 | 10.6 | 19.0 | 30.5 | 0.8 | 0.635 |
| 254M06QD47 | 0.25 | 47 | 1/2 | 1.45 | 0.42 | 0.75 | 1.20 | 0.032 | 0.025 | 36.8 | 10.6 | 19.0 | 30.5 | 0.8 | 0.635 |
| 254M06QD100 | 0.25 | 100 | 1/2 | 1.45 | 0.42 | 0.75 | 1.20 | 0.032 | 0.025 | 36.8 | 10.6 | 19.0 | 30.5 | 0.8 | 0.635 |
| 254M06QD150 | 0.25 | 150 | 1/2 | 1.45 | 0.42 | 0.75 | 1.20 | 0.032 | 0.025 | 36.8 | 10.6 | 19.0 | 30.5 | 0.8 | 0.635 |
| 504M06QE22 | 0.5 | 22 | 1/2 | 1.45 | 0.59 | 0.92 | 1.20 | 0.032 | 0.025 | 36.8 | 15.0 | 23.4 | 30.5 | 0.8 | 0.635 |
| 504M06QE47 | 0.5 | 47 | 1/2 | 1.45 | 0.59 | 0.92 | 1.20 | 0.032 | 0.025 | 36.8 | 15.0 | 23.4 | 30.5 | 0.8 | 0.635 |
| 504M06QE100 | 0.5 | 100 | 1/2 | 1.45 | 0.59 | 0.92 | 1.20 | 0.032 | 0.025 | 36.8 | 15.0 | 23.4 | 30.5 | 0.8 | 0.635 |
| 504M06QE150 | 0.5 | 150 | 1/2 | 1.45 | 0.59 | 0.92 | 1.20 | 0.032 | 0.025 | 36.8 | 15.0 | 23.4 | 30.5 | 0.8 | 0.635 |
| 1200 Vdc / 480Vac | | | | | | | | | | | | | | | |
| 104M48QH39 | 0.1 | 39 | 2 | 1.60 | 0.64 | 1.04 | 1.29 | 0.032 | 0.032 | 40.6 | 16.3 | 26.4 | 32.7 | 0.8 | 0.8 |
| 1600 Vdc / 660Vac | | | | | | | | | | | | | | | |
| 104M66QV39 | 0.1 | 39 | 2 | 2.18 | 0.54 | 1 | 1.8 | 0.032 | 0.032 | 55.3 | 13.7 | 25.4 | 45.7 | 0.8 | 0.8 |
| UL/CSA Recognized Across-the-Line Application Type QRL 125VAC Type QRL complies with UL1414/CSA-C22.2 No. 1 | | | | | | | | | | | | | | | |
| 104MACQRL150 | 0.1 | 150 | 1/2 | 1.08 | 0.44 | 0.66 | 0.82 | 0.032 | 0.025 | 27.4 | 11.18 | 16.7 | 20.8 | 0.8 | 0.635 |
| 104MACQRL680 | 0.1 | 680 | 1/2 | 1.08 | 0.44 | 0.66 | 0.82 | 0.032 | 0.025 | 27.4 | 11.18 | 16.7 | 20.8 | 0.8 | 0.635 |

Type QRL: UL File No. E33628, CSA File No. LR32208

¹ Two watt resistor is wire wound

Shaded items are stocked parts

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