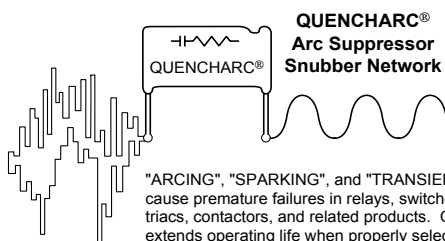
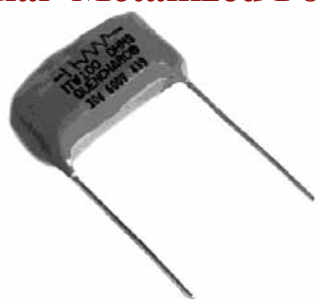


# Type Q/QRL (Quencharc®) Arc Suppressor/ Snubber Network

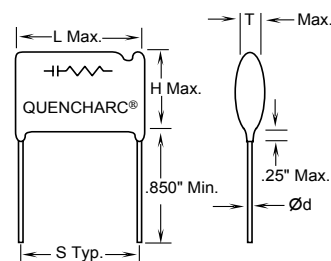
## Radial Metallized Polyester RC Network for Transient Suppression



### 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

### Outline Dimensions



### Specifications

- Capacitance Range:** 0.10  $\mu$ F, 0.25  $\mu$ F, 0.50  $\mu$ F, 1.0  $\mu$ F
- Voltage Range:** 200 Vdc/125 Vac, 60 Hz thru 1600 Vdc/660 Vac, 60 Hz
- Capacitance Tolerance:**  $\pm$ 20%
- Resistor Tolerance:**  $\pm$ 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<sup>1</sup>
- 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  $\leq$ 5% and DF  $\leq$  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.

### Ratings

RoHS Compliant

Catalog Part Number	Cap (uF)	Resistor Ohms Watts	Dimensions in Inches						Dimensions in Millimeters					
			L Max	T Max	H Max	S Typ.	$\phi_d$ Typ.	$\phi_r$ Typ.	L Max	T Max	H Max	S Typ.	$\phi_d$ Typ.	$\phi_r$ Typ.
<b>200 Vdc / 125Vac</b>														
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
<b>600 Vdc / 250Vac</b>														
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 <sub>c</sub>	Ød <sub>f</sub>	L	T	H	S	Ød <sub>c</sub>	Ød <sub>f</sub>
				Max	Max	Max	Typ.	Typ.	Typ.	Max	Max	Max	Typ.	Typ.	Typ.
<b>600 Vdc / 250Vac</b>															
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
<b>1200 Vdc / 480Vac</b>															
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
<b>1600 Vdc / 660Vac</b>															
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
<b>UL/CSA Recognized Across-the-Line Application    Type QRL 125VAC    Type QRL complies with UL1414/CSA-C22.2 No. 1</b>															
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

<sup>1</sup> Two watt resistor is wire wound

Shaded items are stocked parts