

# **Type FSQ Series**

### **Key Features**

- Protects Circuit Boards & Designs
- Small Size
- Excellent Long Term Stability
- Complete Flame Proof Construction
- Resistant to High Temperature
- Low Temperature Coefficient
- Uniform in Fusing Time



There are some similarities between resistors and fuses in material and structure. Fusible Resistors contain both functions, as a resistor in normal conditions and as a fuse when abnormal currents are applied, so to protect machinery and equipment. Cost savings are apparent as one component is eliminated. The FSQ Fusible Resistor series are produced with precision techniques, enabling precise and stable fusing times.

#### **Characteristics - Electrical**

Operating Temperature (°C):	-55 to +275			
	00101210			
Resistance Temperature Coefficient (°C):	-30 to +150 ±300ppm/°C			
Short Time Overload:	2.5 times of rated voltage for 5 seconds $\Delta R < \pm 2\%$			
Insulation Resistance:	500V Megger - 1000Mohms			
Temperature Cycle (°C):	-30 to +85 for 5 cycles $\Delta R < \pm 1\%$			
Load Life:	70°C on-off cycle 1000 hours $\Delta R < \pm 5\%$			
Moisture-Proof Load Life:	40°C 95% RH on-off cycle 1000 hours $\Delta R < \pm 5\%$			
Solder Pot:	270°C for 3 seconds $\Delta R < \pm 1\%$			
Incombustability:	16 times of rated power for 5 minutes - Not Flamed			
Maximum Working Voltage:	1000 V			

#### **Fusing Characteristics**

Fusing times can be decided by consultation with our design team to meet application requirements.

#### **Derating Curve**



For resistors operated in ambient temperatures above 70°C, power rating must be derated in accordance with this curve.

Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are standard equivalents. Dimensions are shown for reference purposes only. Specifications subject to change.



High Power Resistors (Fusible)

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#### Dimensions



Rated Power	Dimensions					Resistance
	L±1.5	H±0.5	W±1.0	l±3.0	d±0.05	Range (Ohms)
2W	18.0	7.0	7.0	23.0	0.65	R10-10K
ЗW	22.0	8.0	8.0	35.0	0.8	R10-33K
5W	22.0	9.0	10.0	35.0	0.8	R10-50K
7W	35.0	9.0	10.0	35.0	0.8	R10-50K
10W	48.0	9.0	10.0	35.0	0.8	R10-50K

#### How to Order

FSQ	3W	R10	J	T
Common Part	Power Rating	Resistance Value	Tolerance	Packaging
FSQ - Ceramic Housed	30/		J - ±5%	T - Ammo Boxed

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