

Features

- Lead free versions available (RoHS compliant*)
- Overcurrent/lightning protection to BELLCORE GR-1089
- Typical application is secondary protection on telecom line cards
- UL497A recognition
- Thermal fuse links

4B06B-512-RC - Surge Line Protection Module

Matched Pair of Resistors

Electrical Characteristics

Resistance Values (R1 = R2)	5.6 - 100 Ω
Resistance Tolerance	±5 %
TCR	100 ppm/°C
Ratio Tolerance	±2 %
Temperature Range	-40 °C to +85 °C

Physical Characteristics

Body Style	Open Frame SIP
Substrate Material	96 % Alumina
Lead Frame Material	Copper, solder coated
Flammability	Conforms to UL94V-0

Functional Characteristics (per Belcore GR-1089)

First Level Lightning Surge -

Resistors will remain within tolerance after testing.

1000 Volts Peak, 100 Amp Peak Current, Max. Rise/Min. Decay Time 10x1000 μs, 60 Seconds Between Pulses:	
Number of Pulses	25 each resistor each polarity
	25 simultaneous each polarity

2500 Volts Peak, 500 Amp Peak Current, Max. Rise/Min. Decay Time 2x10 μs, 60 Seconds Between Pulses:	
Number of Pulses	10 simultaneous each polarity

First Level AC Power Fault -

Resistors will remain within tolerance after testing.

50 Vrms, 0.33 Amp Short Circuit Current:	
Duration	15 minutes
100 Vrms, 0.17 Amp Short Circuit Current:	
Duration	15 minutes
600 Vrms, 1.00 Amp Short Circuit Current:	
Duration	60 One-second pulses

Second Level Lightning Surge -

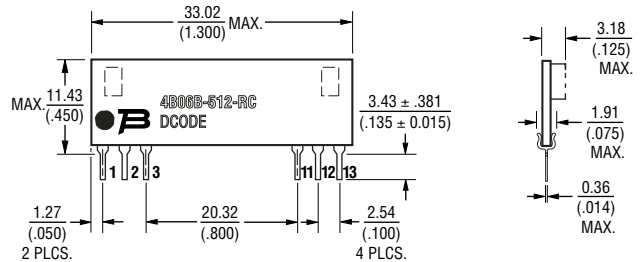
Resistor package must fail safely causing no fire, electrical, or fragmentation hazard.

5000 Volts Peak, 500 Amp Peak Current, Max. Rise/Min. Decay Time 2x10 μs:	
Number of Pulses	1 simultaneous each polarity

Second Level AC Power Fault -

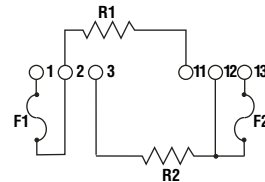
Resistor package must fail safely causing no fire, electrical, or fragmentation hazard.

Product Dimensions



DIMENSIONS: $\frac{\text{MILLIMETERS}}{\text{(INCHES)}}$

Electrical Schematic



How To Order

Model	4B 06 B - 512 - XXX LF
(4B = Open Frame)	
Number of Pins	
Physical Configuration	
Electrical Configuration	512 = Matched pair of resistors plus thermal fuse
Resistance Code	
	• 5R6 = 5.6 Ω
	• 100 = 10 Ω
	• 500 = 50 Ω
	• 101 = 100 Ω
Lead Free Option	
	Blank = Standard Product
	LF = Lead Free / RoHS Compliant Product



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*RoHS Directive 2002/95/EC Jan 27 2003 including Annex.
Specifications are subject to change without notice.
Customers should verify actual device performance in their specific applications.