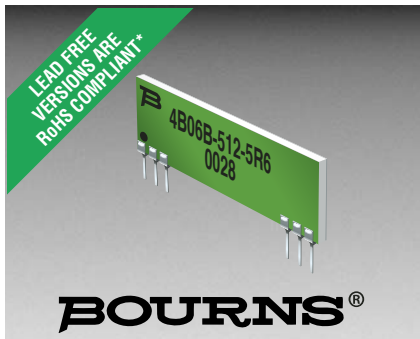




Features

- 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	$\pm 5\%$
TCR	100 ppm/ $^{\circ}\text{C}$
Ratio Tolerance	$\pm 2\%$
Temperature Range	-40 $^{\circ}\text{C}$ to +85 $^{\circ}\text{C}$

Physical Characteristics

Body Style	Open Frame SIP
Substrate Material	96 % Alumina
Lead Frame Material	Copper, solder coated
Flammability	Conforms to UL94V-0
Wave Soldering	260 $^{\circ}\text{C}$ for 3 seconds

Functional Characteristics (per Bellcore 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 -

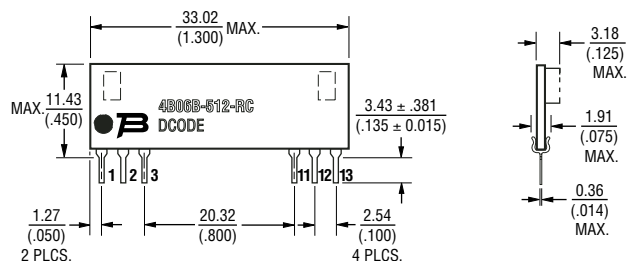
Resistor package must fail safely causing no fire, electrical, or fragmentation hazard.

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 -

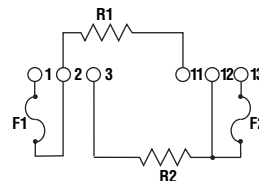
Resistor package must fail safely causing no fire, electrical, or fragmentation hazard.

Product Dimensions



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

Electrical Schematic



How To Order

4B 06 B - 512 - XXX LF

Model _____
(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



Reliable Electronic Solutions

Asia-Pacific: TEL +886- (0)2 25624117 • FAX +886- (0)2 25624116

Europe: TEL +41-41 7685555 • FAX +41-41 7685510

Americas: TEL +1-909 781-5500 • FAX +1-909 781-5700

bourns.com

*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.