

Features

- RoHS compliant* versions available
- Overcurrent/lightning protection to TELCORDIA GR-1089 Issue 4
- Typical application is secondary protection on telecom line cards
- UL497A recognition
- Thermal fuse links
- Must be used in conjunction with a solid state primary protector, or a GDT primary protector

4B06B-DR1-12R5LF - Surge Line Protection Module

Electrical Characteristics

Resistance Value	12.5 ohms
Resistance Tolerance	±5 %
TCR	100 ppm/°C
Ratio Tolerance	±0.5 %
Temperature Range	-40 °C to +85 °C

Physical Characteristics

Body Style	Dual In Line SMD - Twin Pack
Substrate Material	96 % Alumina
Lead Frame Material	Copper, solder coated
Flammability	Conforms to UL94V-0
Processability	Unit is only suitable for no-clean processing
Convection Reflow	Unit will withstand 260 °, 20 seconds

Functional Characteristics @ 25 °C (per Telcordia GR-1089 Issue 3)

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 Pulses25 each resistor each polarity

2500 Volts Peak, 500 Amp Peak Current,
Max. Rise/Min. Decay Time 2x10 µs,
60 Seconds Between Pulses:
Number of Pulses10 simultaneous each polarity

Meets Protection Coordination as defined in Telcordia Section 4.6.7.1, Condition A.

First Level AC Power Fault -

Resistors will remain within tolerance after testing.

50 Vrms, 0.33 Amp Short Circuit Current:
Duration15 minutes

100 Vrms, 0.17 Amp Short Circuit Current:
Duration15 minutes

600 Vrms, 1.00 Amp Short Circuit Current:
DurationSixty 1-second pulses

440 Vrms, 2.2 Amp Short Circuit Current:
DurationFive 2-second pulses,
cooling to ambient between pulses

600 Vrms, 3.00 Amp Short Circuit Current:
DurationFive 1.1-second pulses,
cooling to ambient between pulses

Functional Characteristics @ 25 °C (Continued)

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 Pulses1 simultaneous each polarity

Second Level AC Power Fault -

Resistor package must fail safely causing no fire, electrical, or fragmentation hazard. Device will fail prior to Bussman MDQ 1-6/10 A fuse in series.

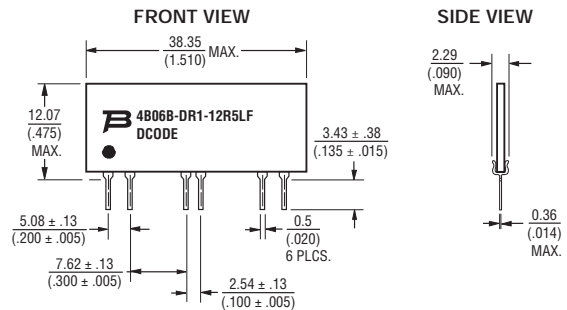
100 Vrms, 2.2 Amp Short Circuit Current:
Duration15 minutes

600 Vrms, 7 Amp Short Circuit Current:
Duration5 seconds

250 Vrms, 25 Amp Short Circuit Current:
Duration15 minutes

600 Vrms, 60 Amp Short Circuit Current:
Duration5 seconds

Product Dimensions



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



WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

*RoHS Directive 2015/863, Mar 31, 2015 and Annex.
Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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4B06B-DR1-12R5LF - Surge Line Protection Module **BOURNS**[®]

How To Order

4B 06 B - DR1 - 12R5 LF

Model _____
(4B = Open Frame)

Number of Pins _____

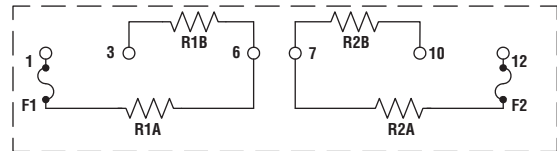
Physical Configuration _____

Electrical Configuration _____
DR1 = Custom

Resistance Code _____
12R5 = 12.5 Ohms

RoHS Compliant Option _____
Blank = Standard Product
LF = RoHS Compliant Product

Electrical Schematic



NOTES:

R1A + R1B + F1 = 12.5 OHMS \pm 5 %.

R2A + R2B + F2 = 12.5 OHMS \pm 5 %.

RATIO MATCH: R1 / R2 = 1 \pm 2.5 %.

CO-PLANARITY = 0.004 INCHES.

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