FAILSAFE FUSIBLE WIREWOUND RESISTORS

**LF2 SERIES**

**FEATURES**
- Industry’s widest range!
- Withstands lightning surges and power crosses
- Resistance range: 0.01Ω to 10KΩ
- LF2 1Ω to 1.6K meets UL497A, Bellcore GR1089, ITU-T K.20
- LF2A meets Bellcore TR1089 specifications
- Standard tolerance: ±1% or ±5% (available to ±0.01%)
- Available on RCD’s exclusive SWIFT™ delivery program!

**FEATURES**
- Option A: TR1089 performance
- Option X: Non-inductive (0.2µH max)
- Option ER: 100 Hour Burn-In
- Matched pairs or groups
- Customized fusing characteristics
- Option to 10K

**APPLICATION NOTES:**
Failsafe surge resistors are often tailored to particular customer requirements. Consultation with RCD’s Engineering department is recommended on all applications to ensure optimum performance at the most cost-effective price. Depending on the application, Series LF2 or LF2A can often satisfy the requirements of UL497A, UL1950, UL1459, FCC Part 68, REA 397 & PE60, Bellcore GR1089 & TR1089, ITU-T K.20 & K.21, VDE 0750, IEC 1000-4, CCITT K17, IEEE 472 & 587, ANSI C37.90 & C62.41, SAE J1113, MIL-STD-704, MIL-STD-1399, & MIL-STD-1275.

**TYPICAL PERFORMANCE CHARACTERISTICS**

**HOW TO USE LF2**
Pin #1 and #2 shall be shorted together by the user on the PCB. The LF2 resistor is connected into the circuit via pins #3 and #4.

<table>
<thead>
<tr>
<th>RCD Type</th>
<th>Wattage @ 25°C</th>
<th>Resistance Range</th>
<th>DIMENSIONS Inch [mm]</th>
</tr>
</thead>
</table>

* LF2A resistance range is 1.8Ω to 100Ω*

**RESISTORS**

<table>
<thead>
<tr>
<th>POWER (Watts)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3W</td>
</tr>
<tr>
<td>5W</td>
</tr>
<tr>
<td>10W</td>
</tr>
<tr>
<td>30W</td>
</tr>
<tr>
<td>50W</td>
</tr>
<tr>
<td>100W</td>
</tr>
</tbody>
</table>

**P/N DESIGNATION:**
RCD Type LF2 - 1001 - F B W
Options: X, ER, A (leave blank for standard).

**Resis. Code 1%:** 3 signif. figures & multiplier:
(R100=1Ω, R10=1Ω, 10Ω=1Ω, 100Ω=1Ω, 1000Ω=1Ω, etc)

**Resis. Code 2%-10%:** 2 signif. figures & multiplier:
(R10=0.1Ω, 1Ω=1Ω, 10Ω=1Ω, 1Ω=1Ω, 1Ω=1Ω, 1Ω=1Ω, etc)

**Tolerance Code:** J=5%, H=3%, G=2%, F=1%

**Packaging:** B = Bulk (standard)

**Optional Temp. Coefficient:** (leave blank for standard):
5=5ppm, 10 = 10ppm, 20 = 20ppm, etc.

**Termination:** W=Pb-free, Q=Sn/Pb (leave blank if either is acceptable)

**TYPICAL PERFORMANCE CHARACTERISTICS**

- Wattage Derating: 21mW/C >25°C
- Load Life (1000 hours): ±0.5%
- Moisture Resistance: ±1%
- Temperature Cycling: ±0.5% (-55 to +120°C)
- Short Time Overload: ±0.2%(10W, 5 Sec)
- Lightning Surge Capability:
  - LF2 5.6Ω -10K
  - LF2A 1.8 -100Ω
  10µSx1000µS 1KV/100A peak, 10Ω source, 50 pulses x 60S rep (peak voltages up to 10KV avail.)
- Temperature Coefficient:
  - .1Ω to .9Ω 1Ω and above
  - Standard: 90ppm 10Ω, 20Ω, 30Ω, 50Ω, 10Ω, 20Ω, 30Ω
- Operating Temperature -55°C to +120°C std (may be higher or lower on custom designs depending on fuse rating)
- Flammability UL 94V-0, EC 695-2-2

**Fusing Characteristics**

<table>
<thead>
<tr>
<th>Power (Watts)</th>
<th>LF2 Fusing Range (Seconds, Typ.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2W</td>
<td>500</td>
</tr>
<tr>
<td>3W</td>
<td>300</td>
</tr>
<tr>
<td>5W</td>
<td>200</td>
</tr>
<tr>
<td>10W</td>
<td>150</td>
</tr>
<tr>
<td>30W</td>
<td>100</td>
</tr>
<tr>
<td>50W</td>
<td>75</td>
</tr>
<tr>
<td>100W</td>
<td>60</td>
</tr>
<tr>
<td>300W</td>
<td>50</td>
</tr>
<tr>
<td>500W</td>
<td>40</td>
</tr>
</tbody>
</table>

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FA0238 Sale of this product is in accordance with GF-061. Specifications subject to change without notice.