

FAILSAFE FUSIBLE WIREWOUND RESISTORS

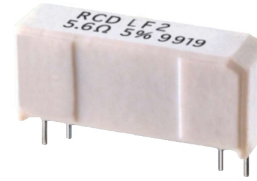
LF2 SERIES



Term.W is
RoHS
compliant
& 260°C
compatible



RESISTORS • CAPACITORS • COILS • DELAY LINES



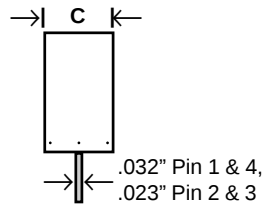
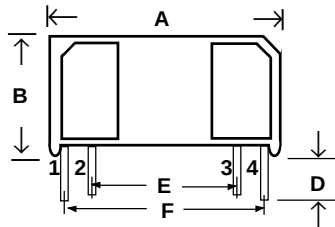
FEATURES

- 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!

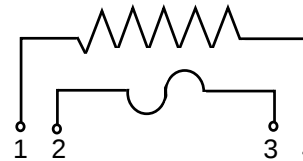
OPTIONS

- Option A: TR1089 performance
- Option X: Non-inductive (0.2μH max ≤50Ω, 0.37μH >50Ω)
- Option ER: 100 Hour Burn-In
- Customized fusing characteristics
- Matched pairs or groups

RCD type LF2 is designed to provide circuit protection for telecom applications, such as line feed, ADSL, HDSL, and switching networks, as well as snubber circuits, switching regulators, power faults, etc. The LF2 is a combination power resistor and isolated thermal fuse housed in a ceramic case. The combination enables the device to withstand short-time overloads (various lightning surges, AC power crosses, inrush currents, and ESD pulses), yet open safely under extended overload conditions. The all-welded internal construction combined with highest grade materials ensures utmost performance and reliability. For even greater protection under power cross conditions, as required by TR1089, specify LF2A.



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.

RCD Type	Wattage @ 25°C	Resistance Range	DIMENSIONS Inch [mm]					
			A	B	C	D	E	F
LF2	2.0 W	0.01Ω - 10KΩ*	1.045±.02 [26.5±.5]	.450±.02 [11.43±.5]	.265±.02 [6.73±.5]	.125 Min. [3.17±.5]	.700±.015 [17.78±.4]	.900±.015 [22.86±.4]

* LF2A resistance range is 1.8Ω to 100Ω

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 .10Ω to .99Ω 1Ω and above	Standard 90ppm Optional 10,20,30,50 50ppm 10,20,30
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	Power (Watts) 100W 50W 30W 10W 3W 10 20 30 50 100 200 300 500 LF2 Fusing Range (Seconds, Typ.)

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.

P/N DESIGNATION: LF2 - 1001 - F B W

RCD Type LF2
Options: X, ER, A (leave blank for standard)
Resis.Code 1%: 3 signif. figures & multiplier, (R100=1Ω, 1R00=1Ω, 10R0=10Ω, 1000=100Ω, 1001=1K, etc)
Resis.Code 2%-10%: 2 signif. figures & multiplier, (R10=0.1Ω, 1R0=1Ω, 100=10Ω, 101=100Ω, 102=1K, 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)