

SUBMINIATURE SURFACE MOUNT

Nanofuse™ Very Fast-Acting Type Fuse



Nanofuse™ has similar electrical performance characteristics to the PICO® Fuse and is designed to meet a wide variety of electrical and environmental MIL specifications for more demanding applications.

ELECTRICAL CHARACTERISTICS:

% of Ampere Rating	Ampere Rating	Opening Time
100%	1/16–15	4 hours, Minimum
	1/16–5	1 second, Maximum
200%	7–10	5 seconds, Maximum
	12–15	20 seconds Maximum

AGENCY APPROVALS: Recognized under the Components Program of Underwriters Laboratories and Certified by CSA.

AGENCY FILE NUMBERS: UL E10480, CSA LR 29862.

INTERRUPTING RATINGS:

300 amperes at rated voltage VDC

50 amperes at rated voltage VAC

ENVIRONMENTAL SPECIFICATIONS:

Operating Temperature: –55°C to 125°C.

Shock: MIL-STD-202, Method 213, Test Condition I (100 G's peak for six (6) milliseconds).

Vibration: MIL-STD-202, Method 201 (10–55 Hz, .06 in. total excursion).

Salt Spray: MIL-STD-202 Method 101, Test Condition B (48 hrs.).

Insulation Resistance (After Opening): MIL-STD-202, Method 302, Test Condition A, (1/2 Megohm minimum).

Resistance to Soldering Heat: MIL-STD-202, Method 210, Test Condition F (20 sec. at 260°C).

Thermal Shock: MIL-STD-202, Method 107, Test Condition B (–65 to 125°C).

Moisture Resistance: MIL-STD-202, Method 106, High Humidity (90-98 RH), Heat (65°).

PHYSICAL SPECIFICATIONS:

Materials: Body: Ceramic

Terminations: Plated Brass Caps.

Soldering Parameters:

Wave Solder — 260°C, 10 seconds maximum

Reflow Solder — 260°C, 30 seconds maximum

Solderability: MIL-STD-202, Method 208.

PACKAGING SPECIFICATIONS: 12mm Tape and Reel per EIA-RS481 (IEC 286, part 3); 1,000 per reel.

PATENTED

ORDERING INFORMATION:

Catalog Number	Ampere Rating	Voltage Rating	Nominal Resistance Cold Ohms	Nominal Melting I ² t A ² Sec.
R271.062	1/16	125	7.0	0.0000750
R271.125	1/8	125	1.75	0.00163
R271.250	1/4	125	0.665	0.0106
R271.375	3/8	125	0.395	0.0254
R271.500	1/2	125	0.304	0.0546
R271.750	3/4	60	0.167	0.155
R271.001	1	60	0.109	0.281
R271.01.5	1½	60	0.0603	0.650
R271.002	2	60	0.0440	0.421
R271.02.5	2½	60	0.0340	0.721
R271.003	3	60	0.0270	1.23
R271.03.5	3½	60	0.0220	1.65
R271.004	4	60	0.0190	2.35
R271.005	5	32	0.0145	3.90
R271.007	7	32	0.0085	10.5
R271.010	10	32	0.0055	24.2
R271.012	12	32	0.0044	45.5
R271.015	15	32	0.0033	70.1

