

0603 Very Fast-Acting Thin-Film Type 431 Series



Super-small size saves valuable board space while providing high power density. Ideal for circuit protection of disk drives, PCMCIA cards and cellular phones.

ELECTRICAL CHARACTERISTICS:

% of Ampere Rating	Opening Time at 25°C
100%	4 hours, Minimum
200%	5 seconds, Maximum
300%	0.2 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:

.25–1A 50 amperes at 32 VAC/VDC
1–5A 35 amperes at 32 VAC/VDC

ENVIRONMENTAL SPECIFICATIONS:

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

Vibration: Withstands 10-55 HZ per MIL-STD-202F, Method 201A and 10-2000 HZ at 20 G's per MIL-STD-202F, Method 204D, Condition D.

Insulation Resistance (After Opening): Greater than 500,000 ohms.

Resistance To Soldering Heat: Withstands 60 seconds above 200°C up to 260°C, maximum.

Thermal Shock: Withstands 5 cycles of –50°C to 125°C.

PHYSICAL SPECIFICATIONS:

Materials: Body: Epoxy Substrate
Terminations: Copper/Nickel/Tin-Lead (95/5)
Cover Coat: Conformal Coating

Soldering Parameters:

Wave Solder — 260°C, 10 seconds maximum
Reflow Solder — 260°C, 30 seconds maximum

PACKAGING SPECIFICATIONS: 8mm Tape and Reel per EIA-RS481 (IEC 286, part 3); 5,000 per reel, add packaging suffix, NR.

PATENTED

ORDERING INFORMATION:

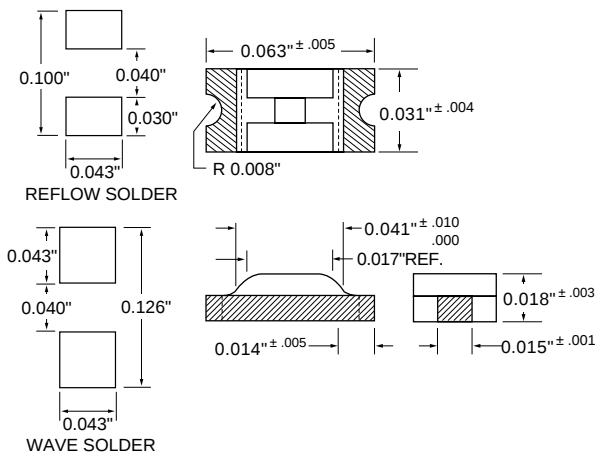
Catalog Number	Ampere Rating	Voltage Rating	Nominal Resistance Cold Ohm ¹	Nominal Voltage Drop (V) ²	Melting I ² t (A ² Sec.)
431.250	1/4	32	0.375	0.130	0.0030
431.375	3/8	32	0.265	0.084	0.0053
431.500	1/2	32	0.193	0.120	0.0087
431.750	3/4	32	0.114	0.110	0.0171
431.001	1	32	0.072	0.100	0.0210
431.01.5	1 1/2	32	0.048	0.082	0.0696
431.002	2	32	0.036	0.077	0.104
431.02.5	2 1/2	32	0.028	0.089	0.175
431.003	3	32	0.023	0.080	0.198
431.03.5	3 1/2	32	0.019	0.090	0.265
431.004	4	32	0.017	0.100	0.420
431.005	5	32	0.013	0.107	0.600

¹Measured at 10% of rated current, 25°C.

²Measured at 100% of rated current, 25°C.



Reference Dimensions:



Average Time Current Curves

