

Description

- Rapid interruption of excessive current
- Compatible with reflow and wave solder
- Rugged ceramic and glass construction
- Excellent environmental integrity
- One time positive disconnect
- Compatible with lead free solders and higher temperature profiles

ELECTRICAL CHARACTERISTICS	
% of Amp Rating	Opening Time
100%	4 Hours Minimum
200%	60 Seconds Maximum

Agency Information

- UL Recognition Card: JDYX2, E19180
- CSA Component Acceptance Card: 053787 C 000, Class Number 1422 30

Environmental Data

- Life Test: MIL-STD-202, Method 108A
- Load Humidity Test: MIL-STD-202, Method 103B
- Moisture Resistance Test: MIL-STD-202, Method 106E
- Terminal Strength Test: Downward force is applied to cause a 1mm deflection for 1 minute
- Thermal Shock Test: MIL-STD-202, Method 107D
- Solderability: ANSI/J-STD-002
- Mechanical Shock Test: MIL-STD-202, Method 213B
- High Frequency Vibration Test: MIL-STD-202, Method 204D
- Resistance to Solvents Test: MIL-STD-202, Method 215A

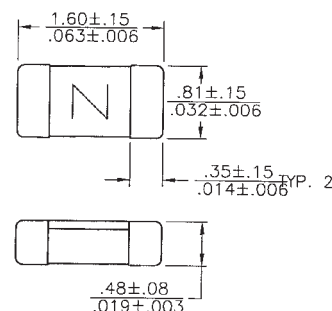
Ordering

- Specify packaging and product code (i.e., TR/0603FA250-R)

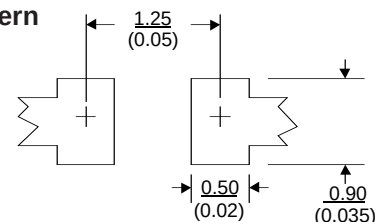


Dimensions ^{mm/(inches)}

Drawing Not to Scale



Land Pattern



Soldering Method

- Wave Solder: 260°C, 10 sec max.
- Infrared Reflow: 260°C, 30 sec max.

SPECIFICATIONS							
Product Code	Current Rating	Voltage Rating DC	Interrupting Rating at Rated Voltage*	DC Cold Resistance** (ohms) Typical	Typical Melting I ² t***	Typical Voltage Drop†	Alpha Code Marking‡
0603FA250-R	250mA	32V	50A	3.100	0.0004	0.921	D
0603FA375-R	375mA	32V	50A	1.250	0.0009	0.605	E
0603FA500-R	500mA	32V	50A	1.025	0.00193	0.600	F
0603FA750-R	750mA	32V	50A	0.450	0.0090	0.440	G
0603FA1-R	1A	32V	50A	0.150	0.0025	0.211	H
0603FA1.25-R	1.25A	32V	35A	0.108	0.0130	0.151	J
0603FA1.5-R	1.5A	32V	35A	0.086	0.0319	0.138	K
0603FA2-R	2A	32V	35A	0.051	0.0491	0.116	N
0603FA2.5-R	2.5A	24V	35A	0.037	0.0625	0.113	O
0603FA3-R	3A	24V	35A	0.028	0.0699	0.110	P
0603FA3.5-R	3.5A	24V	35A	0.022	0.1200	0.103	R
0603FA4-R	4A	24V	35A	0.017	0.2430	0.097	S
0603FA5-R	5A	24V	35A	0.011	0.6950	0.090	T

* DC Interrupting Rating (Measured at designated voltage, time constant of less than 50 microseconds, battery source)

** DC Cold Resistance (Measured at ≤10% of rated current)

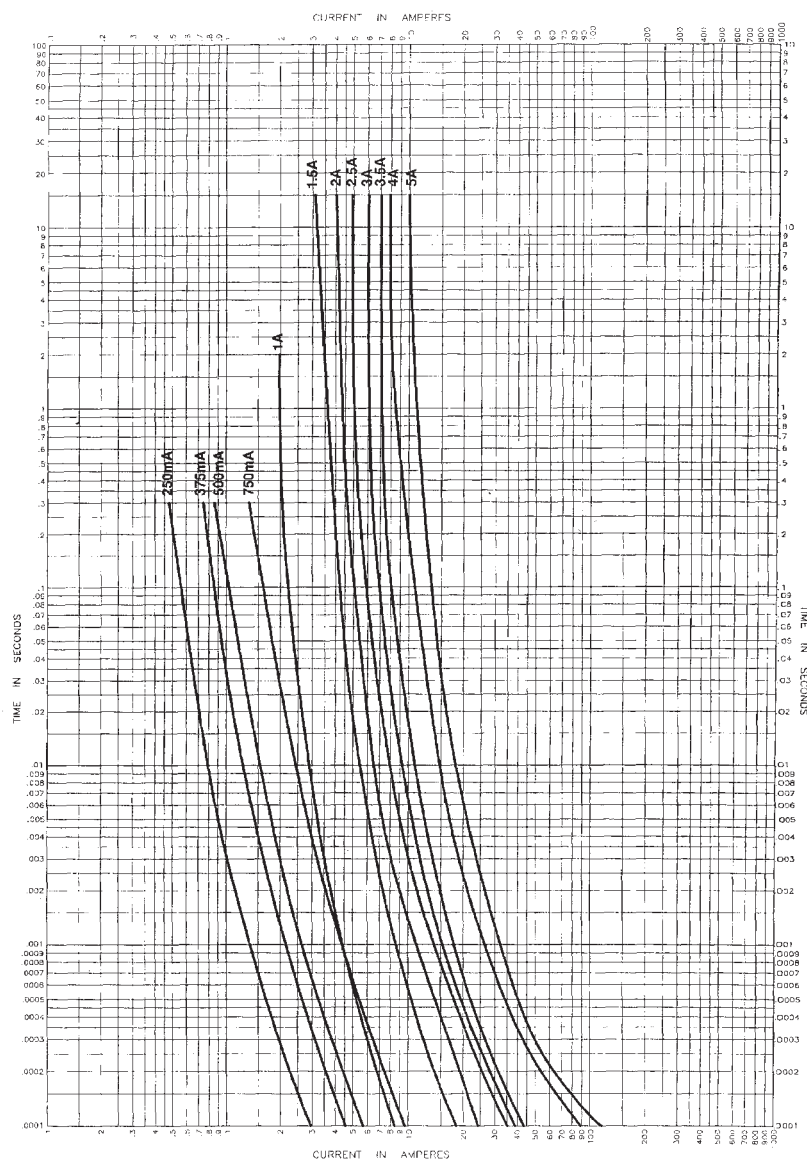
*** Typical Melting I²t (Measured with a battery bank at rated DC voltage, 10x-rated current, not to exceed IR, time constant of calibrated circuit less than 50 microseconds) (0603FA4A and 5A measured at interrupting rating)

† Typical Voltage Drop (Measured at rated current after temperature stabilizes)

‡ Alpha code to be marked on the top of fuse body for all ratings

• Device designed to carry rated current for four hours minimum. An operating current of 80% or less of rated current is recommended, with further derating required at elevated ambient temperatures.

TIME CURRENT CURVE



PACKAGING CODE	
Packaging Code	Description
TR	5,000 pieces of fuses in paper tape and reeled on a 178mm (7 inch) reel per EIA Standard 481-1

North America

Cooper Electronic Technologies
1225 Broken Sound Parkway NW
Suite F
Boca Raton, FL 33487-3533
Tel: 1-561-998-4100
Fax: 1-561-241-6640
Toll Free: 1-888-414-2645

Cooper Bussmann
P.O. Box 14460
St. Louis, MO 63178-4460
Tel: 1-636-394-2877
Fax: 1-800-544-2570

Europe

Cooper Electronic Technologies
Cooper (UK) Limited
Burton-on-the-Wolds
Leicestershire • LE12 5TH UK
Tel: +44 (0) 1509 882 737
Fax: +44 (0) 1509 882 786

Cooper Electronic Technologies
Avda. Santa Eulalia, 290
08223
Terrassa, (Barcelona), Spain
Tel: +34 937 362 812
+34 937 362 813
Fax: +34 937 362 719

Asia Pacific

Cooper Electronic Technologies
1 Jalan Kilang Timor
#06-01 Pacific Tech Centre
Singapore 159303
Tel: +65 278 6151
Fax: +65 270 4160