BUSSMANN electronic fuses

COOPER Bussmann

Chip™ Fuses

0603FA Series, Fast Acting

Description

- Rapid interruption of excessive current
- Compatible with reflow and wave solder
- Rugged ceramic and glass construction
- Excellent environmental integrity
- One time positive disconnect
- 100% tin (lead free) plating option available
- 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

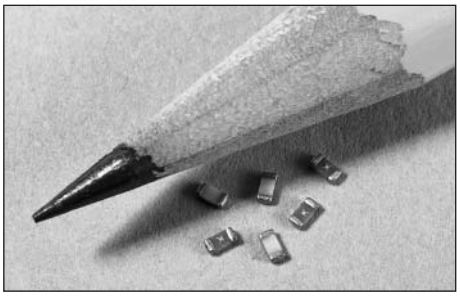
- UL Recognition Card: JDYX2, E19180
- CSA Component Acceptance Card: 053787 C 000, Class Number 1422 30

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

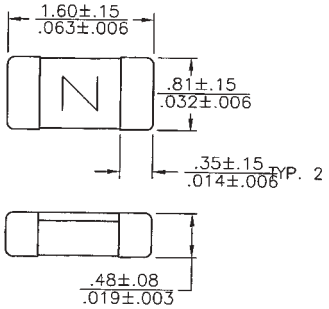
Ordering

- Specify product code and packaging code
- Specify "-T" for lead free plating

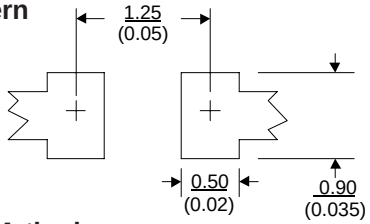


Dimensions mm/(inches)

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	Voltage Rating DC	Interrupting Rating at Rated Voltage*	DC Cold Resistance** (ohms) Typical	Typical Melting I^2t***	Typical Voltage Drop†	Alpha Code Marking‡
0603FA250mA	32V	50A	3.100	0.0004	0.921	D
0603FA375mA	32V	50A	1.250	0.0009	0.605	E
0603FA500mA	32V	50A	1.025	0.00193	0.600	F
0603FA750mA	32V	50A	0.450	0.0090	0.440	G
0603FA1A	32V	50A	0.150	0.0025	0.211	H
0603FA1.25A	32V	35A	0.108	0.0130	0.151	J
0603FA1.5A	32V	35A	0.086	0.0319	0.138	K
0603FA2A	32V	35A	0.051	0.0491	0.116	N
0603FA2.5A	24V	35A	0.037	0.0625	0.113	O
0603FA3A	24V	35A	0.028	0.0699	0.110	P
0603FA3.5A	24V	35A	0.022	0.1200	0.103	R
0603FA4A	24V	35A	0.017	0.2430	0.097	S
0603FA5A	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)

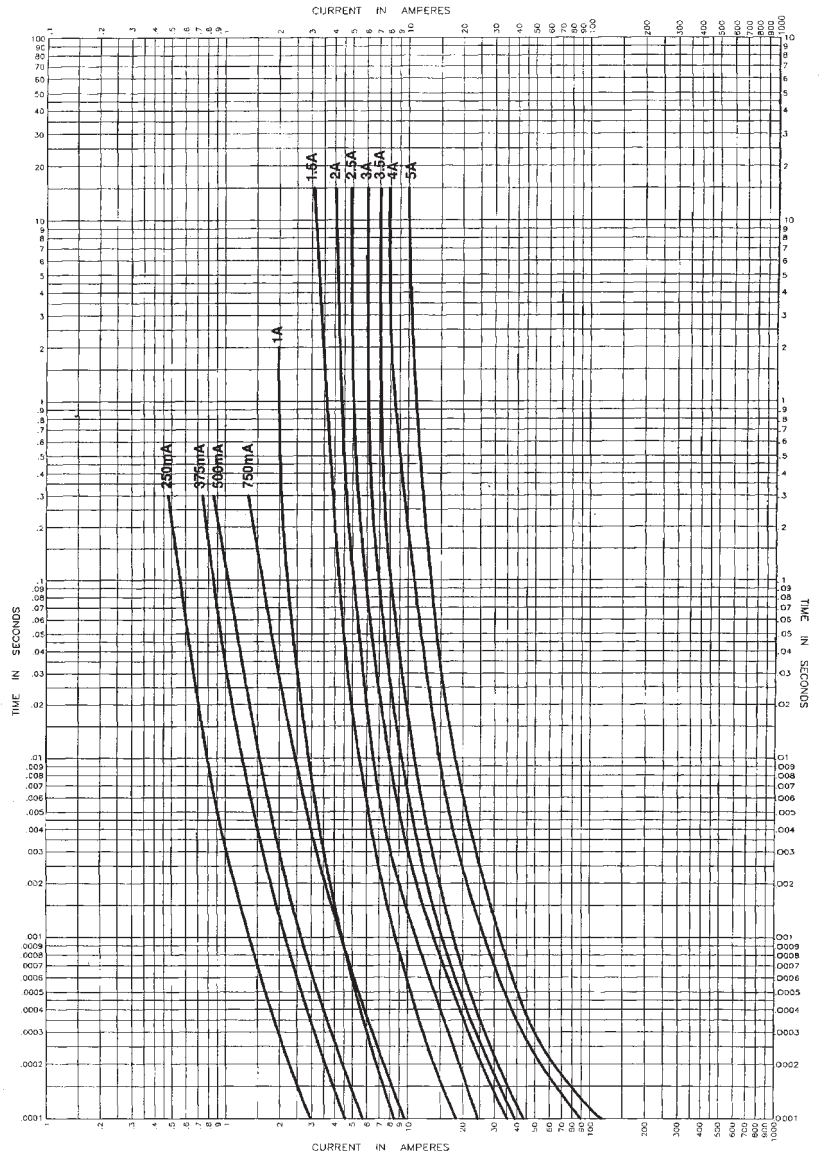
*** Typical Melting I^2t (Measured with a battery bank at rated DC voltage, 10x-rated current, not to exceed IR, time constant of calibrated circuit less than 50 microseconds) (0603FA4A and 5A measured at interrupting rating)

† 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



OPTION CODE	
Option Code	**Description**
T	Lead free plating

PACKAGING CODE	
Packaging Code	**Description**
SP	50 piece sample pack
TR	5,000 pieces of fuses in paper tape and reeled on a 178mm (7 inch) reel per EIA Standard 481-1

OC-2547 Rev. XJ 5/03

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