COOPER Bussmann

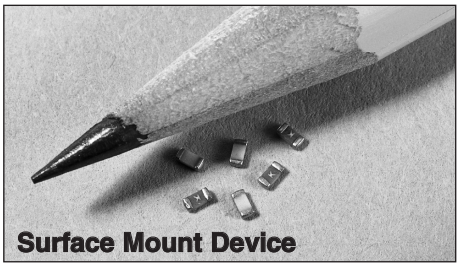
Chip™ Fuses

0603FA Series, Fast-Acting

Description

- Fast-acting 0603 surface mount fuse
- Excellent temperature and cycling characteristics
- 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 Guide & File numbers: JDYX2 &E19180
- CSA Component Acceptance: 053787 C 000 & Class Number: 1422 30

Environmental Data

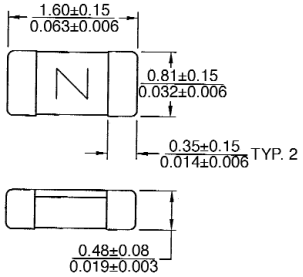
- Operating temparture: -55ºC to 125ºC with proper derating
- Load humidity test: MIL-STD-202, Method 103B
- Moisture resistance test: MIL-STD-202, Method 106E
- Thermal shock test: MIL-STD-202, Method 107D
- High frequency vibration test: MIL-STD-202, Method 204D

Ordering

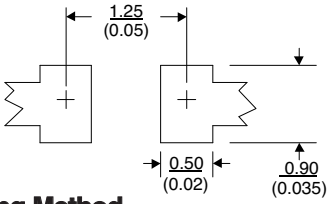
- Specify packaging and product code (i.e., TR/0603FA250-R)

Dimensions – mm/inches

Drawing Not to Scale



Recommended Pad Layout – mm/inches



Soldering Method

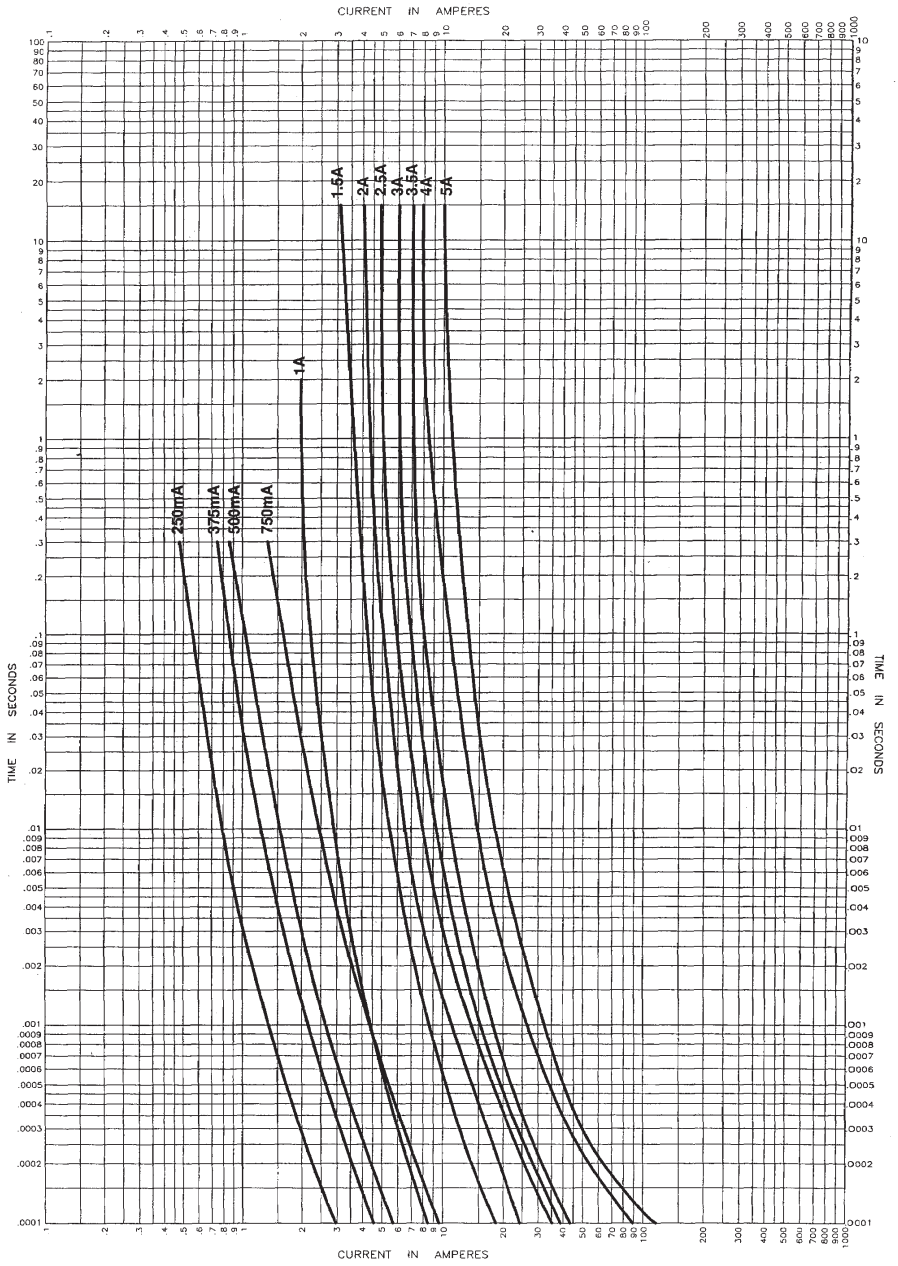
- Wave solder: 260°C, 10 sec max.
- Solder reflow: 260°C, 30 sec max.

Specifications

Part Number	Current Rating (amps)	Voltage Rating	Interrupting Rating (amps) at Rated Voltage*	DC Cold Resistance** (Ω) Typical	Typical Melting I²t***	Typical Voltage Drop†	Alpha Code Marking‡
0603FA250-R	250mA	50Vdc	50	3.100	0.0004	0.921	D
0603FA375-R	375mA	50Vdc	50	1.250	0.0009	0.605	E
0603FA500-R	500mA	32Vac/50dc	50ac/35dc	1.025	0.00193	0.600	F
0603FA750-R	750mA	32Vac/dc	50	0.450	0.0090	0.440	G
0603FA1-R	1	32Vac/dc	50	0.150	0.0025	0.211	H
0603FA1.25-R	1.25	32Vac/dc	35	0.108	0.0130	0.151	J
0603FA1.5-R	1.5	32Vac/dc	35	0.086	0.0319	0.138	K
0603FA2-R	2	32Vac/dc	35	0.051	0.0491	0.116	N
0603FA2.5-R	2.5	32Vac/dc	35	0.037	0.0625	0.113	O
0603FA3-R	3	32Vac/dc	35	0.028	0.0699	0.110	P
0603FA3.5-R	3.5	32Vac/dc	35	0.022	0.1200	0.103	R
0603FA4-R	4	32Vac/dc	35	0.017	0.2430	0.097	S
0603FA5-R	5	32Vac/dc	35	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

Time Current Curve



Packaging Code	
Packaging Code Prefix	**Description**
TR	5,000 fuses on paper tape and reeled on a 178mm (7 inch) diameter reel per EIA Standard 481-1

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