

0603FA

Fast-acting Chip™ surface mount fuse



Surface Mount Device

Product features

- AEC-Q200 qualified
- Fast-acting surface-mount fuse
- Satisfies the EIA/IS-722 standard
- Solder immersion compatible

Agency information

- UL Recognition Guide & File numbers: JDYX2 & E19180
- CSA Component Acceptance: 053787 C 000 & Class Number: 1422 30

Soldering method

- Wave immersion: +260 °C, 10 seconds maximum
- Infrared reflow: +260 °C, 30 seconds maximum

General specifications

- Operating temperature: -55 °C to +125 °C 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)

Environmental compliance



- Values less than 1 A are not lead free

Electrical Characteristics	
% of Amp Rating	Opening Time
100%	4 hours minimum
200%	60 seconds maximum

Specifications							
Part Number	Current Rating (A)	Voltage Rating	Interrupting Rating (A) at Rated Voltage*	DC Cold Resistance** (Ω) Typical	Typical Melting I _t ***	Typical Voltage Drop†	Alpha Code Marking‡
0603FA250-R	250 mA	50 Vdc	50	3.100	0.0004	0.921	D
0603FA375-R	375 mA	50 Vdc	50	1.250	0.0009	0.605	E
0603FA500-R	500 mA	32 Vac/50 Vdc	50 ac/35 dc	1.025	0.00193	0.600	F
0603FA750-R	750 mA	32 Vac/dc	50	0.450	0.0090	0.440	G
0603FA1-R	1	32 Vac/dc	50	0.150	0.0025	0.211	H
0603FA1.25-R	1.25	32 Vac/dc	35	0.108	0.0130	0.151	J
0603FA1.5-R	1.5	32 Vac/dc	35	0.086	0.0319	0.138	K
0603FA2-R	2	32 Vac/dc	35	0.051	0.0491	0.116	N
0603FA2.5-R	2.5	32 Vac/dc	35	0.037	0.0625	0.113	O
0603FA3-R	3	32 Vac/dc	35	0.028	0.0699	0.110	P
0603FA3.5-R	3.5	32 Vac/dc	35	0.022	0.1200	0.103	R
0603FA4-R	4	32 Vac/dc	35	0.017	0.2430	0.097	S
0603FA5-R	5	32 Vac/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 I_t (Measured with a battery bank at rated DC voltage, 10x-rated current, not to exceed I_R, 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)

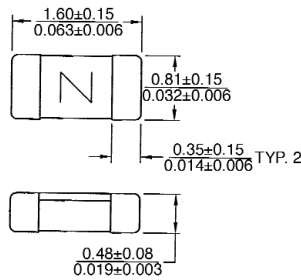
‡ Alpha code to be marked on the top of fuse body for all ratings



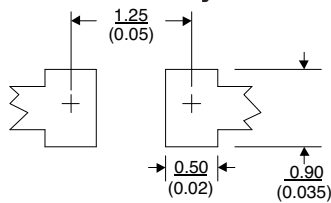
Powering Business Worldwide

Dimensions – mm/inches

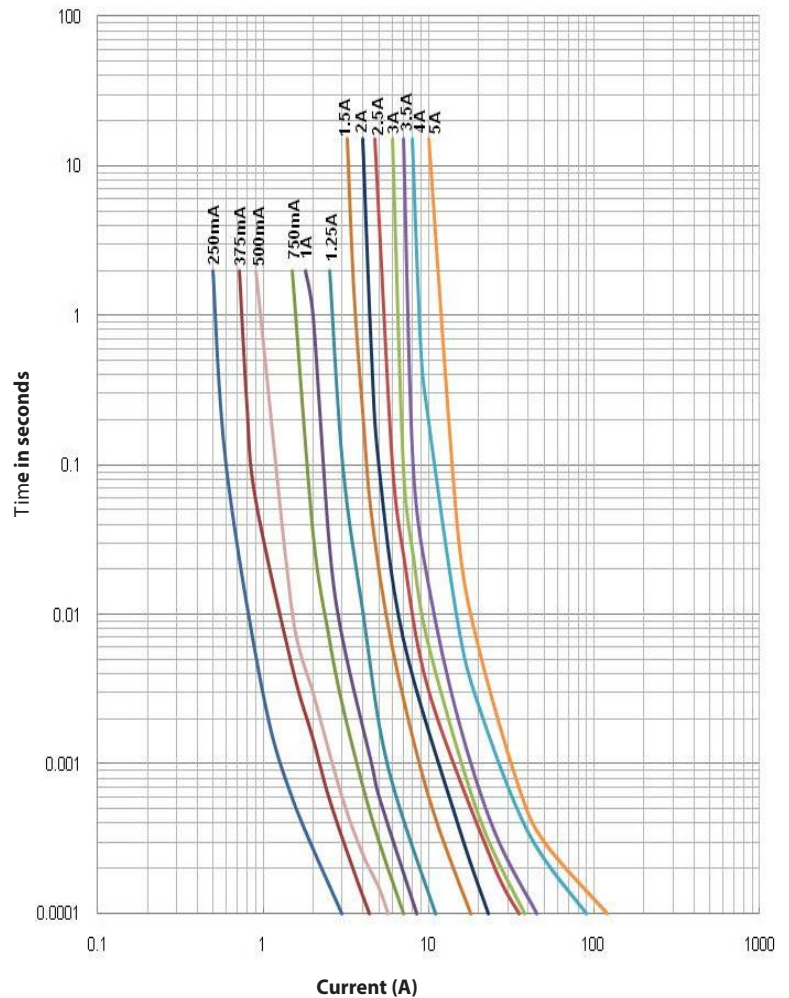
Drawing Not to Scale



Recommended Pad Layout – mm/inches



Time Current Curve



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

Life Support Policy: Eaton does not authorize the use of any of its products for use in life support devices or systems without the express written approval of an officer of the Company. Life support systems are devices which support or sustain life, and whose failure to perform, when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in significant injury to the user.

Eaton reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Eaton also reserves the right to change or update, without notice, any technical information contained in this bulletin.

Eaton
Electronics Division
1000 Eaton Boulevard
Cleveland, OH 44122
United States
www.eaton.com/electronics

© 2021 Eaton
All Rights Reserved
Printed in USA
Publication No. 4336
September 2021

Eaton is a registered trademark.

All other trademarks are property
of their respective owners.

Follow us on social media to get the
latest product and support information.

