BUSSMANN SERIES

0603FA

Fast-acting Chip[™] surface mount fuse









Product features

- Fast-acting surface-mount fuse
- Satisfies the EIA/IS-722 Standard
- Solder immersion compatible

Agency information

- UL Recognition Guide & File numbers: JDYX2 &F19180
- CSA Component Acceptance: 053787 C 000 & Class Number: 1422 30

Soldering method

Wave immersion: 260°C, 10 Sec. max.
Infrared reflow: 260°C, 30 Sec. max.

Environmental data

- 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)

| Electrical Characteristics | | | | |
|----------------------------|--------------------|--|--|--|
| % of Amp Rating | Opening Time | | | |
| 100% | 4 Hours Minimum | | | |
| 200% | 60 Seconds Maximum | | | |

| 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 | Н | | |
| 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 | 0 | | |
| 0603FA3-R | 3 | 32Vac/dc | 35 | 0.028 | 0.0699 | 0.110 | Р | | |
| 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 | Т | | |

^{*} 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)

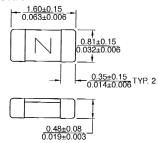
^{***}Typical melting I ²t (Measured with a battery bank at rated DC voltage, 10x-rated current, not to exceed IR, time constant of calibrated circuit less than 50 microseconds) (0603FA4A and 5A measured at interrupting rating)

[†] Typical voltage drop (Measured at rated current after temperature stabilizes)

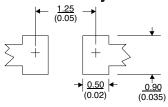
[‡] Alpha code to be marked on the top of fuse body for all ratings

Dimensions - mm/inches

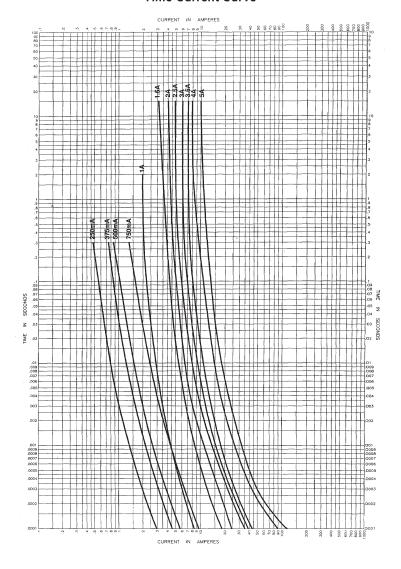
Drawing Not to Scale



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 178mm (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.

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