



**THE DATASHEET OF
TR/0603FA250-R**



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

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 (A) | Voltage Rating | Interrupting Rating (A) at Rated Voltage* | DC Cold Resistance** (Ω) Typical | Typical Melting I ² 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 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)

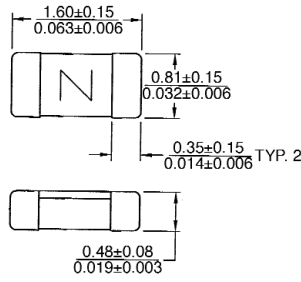
‡ Alpha code to be marked on the top of fuse body for all ratings



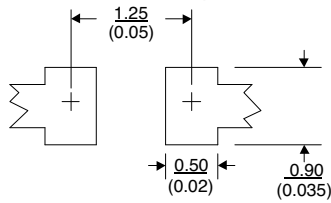
Powering Business Worldwide

Dimensions – mm/inches

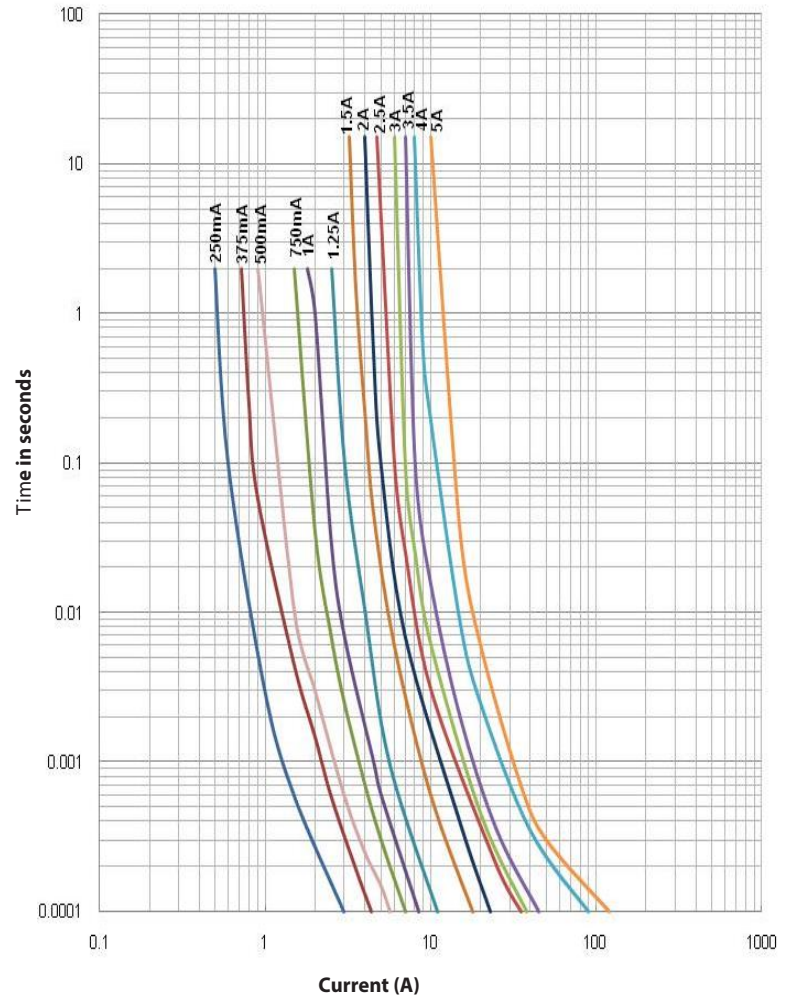
Drawing Not to Scale



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 |

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