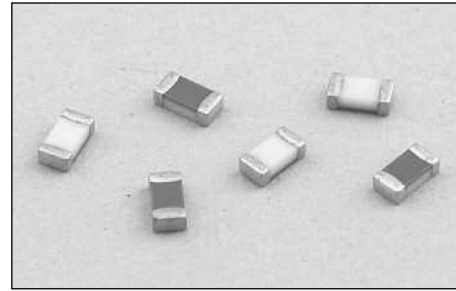


### Description

- Surface mount fuse, fast acting
- Rapid interruption of excessive current
- Compatible with reflow and wave solder
- Excellent environmental integrity
- Ampere rating marked and oriented facing up in carrier
- Solder-free design provides excellent temperature cycling characteristics
- Heat and shock tolerant



| ELECTRICAL CHARACTERISTICS |                 |                    |
|----------------------------|-----------------|--------------------|
| Ampere Rating              | % of Amp Rating | Opening Time       |
| 250mA - 7A                 | 100%            | 4 Hours Minimum    |
| 1.25A - 3A                 | 200%            | 60 Seconds Maximum |
| 250mA - 3A                 | 250%            | 5 Second Maximum   |
| 4A - 7A                    | 350%            | 1 Second Maximum   |

### Agency Information

- UL Recognition Guide & File numbers: JDYX2 & E19180.
- CSA Component Acceptance: 053787 C 000 & Class No: 1422 30.

### Environmental Data

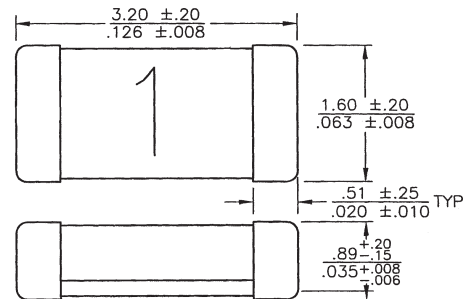
- Thermal Shock: MIL-STD-202, Method 107, Test Condition B
- Vibration: MIL-STD-202, Method 204, Test Condition C
- Moisture Resistance: MIL-STD-202, Method 106, 10 day cycle
- Solderability: ANSI/J-STD-002, Test B

### Ordering

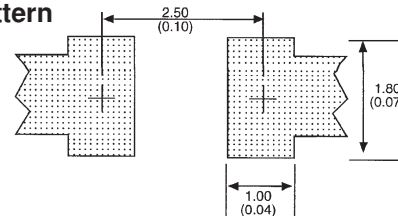
- Specify packaging and product code (i.e. TR/3216FF250-R)

### Dimensions mm/(inches)

Drawing Not to Scale



### Land Pattern



### Soldering Method

- Wave Immersion: 260°C, 10 sec max.
- Infrared Reflow: 260°C, 30 sec max.

## SPECIFICATIONS

| Product Code | Current Rating | Voltage Rating |      | Interrupting Rating*<br>AC/DC | Resistance (ohms)**<br>Typ. | Typical Melt I <sup>2</sup> t†<br>DC | Typical Voltage Drop (V)‡ |
|--------------|----------------|----------------|------|-------------------------------|-----------------------------|--------------------------------------|---------------------------|
|              |                | AC             | DC   |                               |                             |                                      |                           |
| 3216FF250-R  | 250mA          | 32 V           | 63 V | 50 A                          | 3.50                        | 0.00084                              | 1.4                       |
| 3216FF375-R  | 375mA          | 32 V           | 63 V | 50 A                          | 1.75                        | 0.0002                               | 0.73                      |
| 3216FF500-R  | 500mA          | 32 V           | 63 V | 50 A                          | 0.98                        | 0.0019                               | 0.66                      |
| 3216FF750-R  | 750mA          | 32 V           | 63 V | 50 A                          | 0.75                        | 0.00095                              | 0.63                      |
| 3216FF1-R    | 1A             | 32 V           | 63 V | 50 A                          | 0.219                       | 0.007                                | 0.20                      |
| 3216FF1.5-R  | 1.5A           | 32 V           | 63 V | 50 A                          | 0.119                       | 0.029                                | 0.18                      |
| 3216FF2-R    | 2A             | 32 V           | 63 V | 50 A                          | 0.066                       | 0.049                                | 0.16                      |
| 3216FF2.5-R  | 2.5A           | 32 V           | 63 V | 50 A                          | 0.046                       | 0.112                                | 0.14                      |
| 3216FF3-R    | 3A             | 32 V           | 63 V | 50 A                          | 0.036                       | 0.165                                | 0.13                      |
| 3216FF4-R    | 4A             | 32 V           | 32 V | 50 A                          | 0.018                       | 0.189                                | 0.11                      |
| 3216FF4.5-R  | 4.5A           | 32 V           | 32 V | 50 A                          | 0.016                       | 0.328                                | 0.10                      |
| 3216FF5-R    | 5A             | 32 V           | 32 V | 50 A                          | 0.014                       | 0.619                                | 0.09                      |
| 3216FF6.5-R  | 6.5A           | 32 V           | 32 V | 50 A                          | 0.0085                      | 3.21                                 | 0.076                     |
| 3216FF7-R    | 7A             | 32 V           | 32 V | 50 A                          | 0.0085                      | 3.53                                 | 0.078                     |

\* AC Interrupting Rating (Measured at rated voltage with a unity power factor); DC Interrupting Rating (Measured at rated voltage, time constant of less than 50 microseconds, battery source)

\*\* DC Cold Resistance (Measured at 10% of rated current)

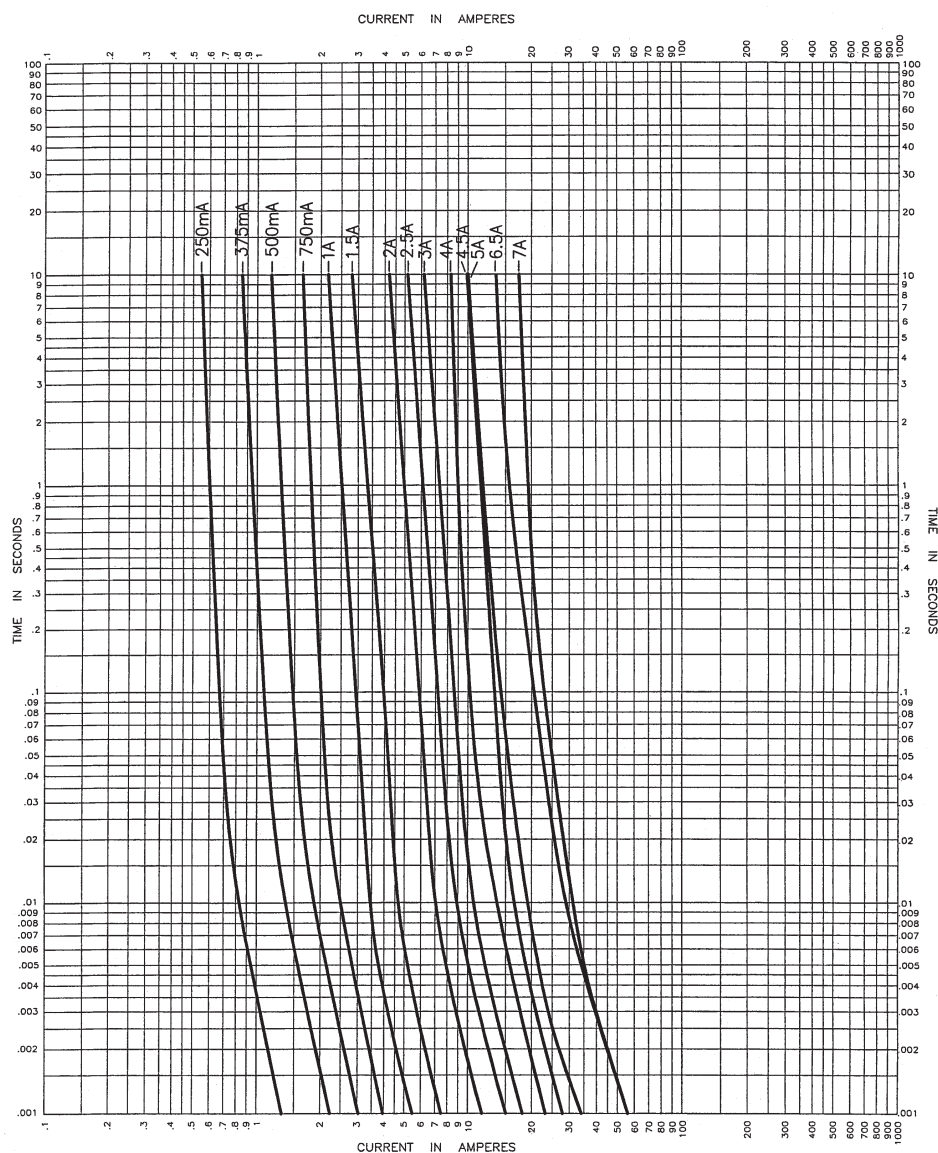
† Typical Melting I<sup>2</sup>t (Measured with a battery bank at rated DC voltage, 10x-rated current, not to exceed IR, time constant of calibrated circuit less than 50 microseconds) (6.5A & 7A measured at interrupting rating)

‡ Typical Voltage Drop (Measured at rated current after temperature stabilizes)

It is recommended that fuses be mounted with ceramic (white) side facing up.

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**



**PACKAGING CODE**

| Packaging Code | Description                                                                              |
|----------------|------------------------------------------------------------------------------------------|
| TR             | 3,000 pieces of fuses on 8mm tape-and-reel on a 7 inch (178mm) reel per EIA Standard 481 |

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