


242 Series Barrier Network Fuse



Agency Approvals

| Agency | Agency File Number | Ampere Range |
|---|--------------------|-----------------|
|  | E10480 | 0.040 - 0.250 A |

Electrical Characteristics

| % of Ampere Rating | Opening Time |
|--------------------|------------------------|
| 100% | 4 hours, Minimum |
| 300% | 10 seconds, Maximum |
| 1000% | 0.002 seconds, Maximum |

Description

The 242 Series hazardous area barrier network fuse offers a range of fuses designed to enable greater safety for electronic equipment within potentially explosive environments.

Features

- High interrupting rating suitable for intrinsic safety protection of hazardous locations equipment.
- Available in both axial lead and surface mount.
- RoHS compliant and Halogen-free.

Applications

- Intrinsic safety electrical equipment; Electrical connections and components; Test equipment

Additional Information



Datasheet




Resources



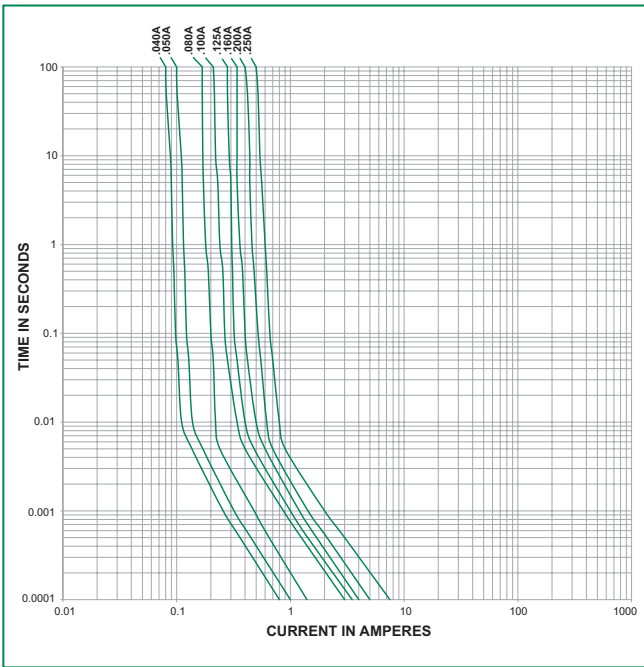
Samples

Electrical Characteristics

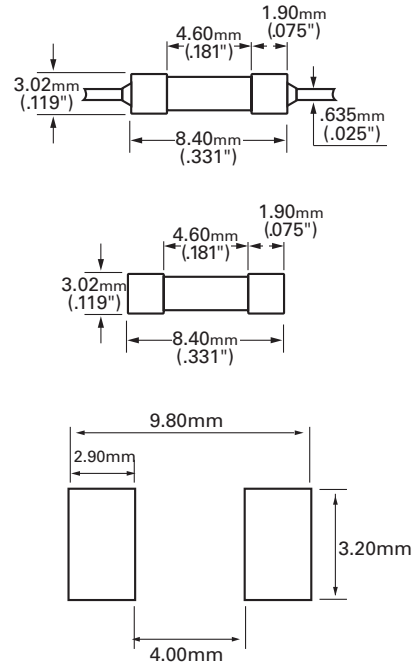
| Ampere Rating (A) | Amp Code | Body Color Coding | Interrupting Rating | Nominal Cold Resistance (Ohms) | Nominal Melting I ² t (A ² Sec.) | Agency Approvals |
|-------------------|----------|-------------------|---------------------|--------------------------------|--|---|
| | | | | | |  |
| 0.040 | .040 | Gold | 4000A @ 250VAC/VDC | 16.48 | 0.000078 | x |
| 0.050 | .050 | Red | | 11.34 | 0.000103 | x |
| 0.080 | .080 | Green | | 8.19 | 0.000214 | x |
| 0.100 | .100 | Blue | | 3.60 | 0.000977 | x |
| 0.125 | .125 | Orange | | 3.78 | 0.001026 | x |
| 0.160 | .160 | Violet | | 3.00 | 0.00157 | x |
| 0.200 | .200 | Brown | | 2.68 | 0.0025 | x |
| 0.250 | .250 | Black | | 1.6 | 0.00579 | x |

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Average Time Current Curves

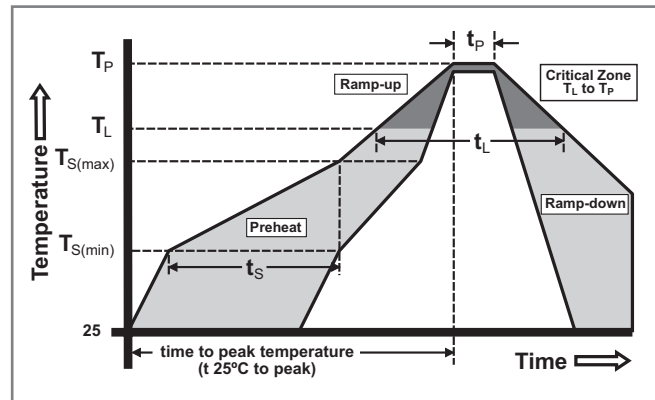


Dimensions



Soldering Parameters

| | | |
|--|------------------------------------|--------------------|
| Reflow Condition | | Pb – Free assembly |
| Pre Heat | - Temperature Min ($T_{s(min)}$) | 150°C |
| | - Temperature Max ($T_{s(max)}$) | 200°C |
| | - Time (min to max) (t_s) | 60 – 180 secs |
| Average ramp up rate (Liquidus Temp (T_L) to peak) | | 5°C/second max |
| $T_{s(max)}$ to T_L - Ramp-up Rate | | 5°C/second max |
| Reflow | - Temperature (T_L) (Liquidus) | 217°C |
| | - Temperature (t_l) | 60 – 150 seconds |
| Peak Temperature (T_p) | | 250 \pm 0/5 °C |
| Time within 5°C of actual peak Temp. (t_p) | | 20 – 40 seconds |
| Ramp-down Rate | | 5°C/second max |
| Time 25°C to peak Temperature (T_p) | | 8 minutes Max. |
| Do not exceed | | 260°C |



| | |
|----------------|------------------------|
| Wave Soldering | 260°C, 10 seconds max. |
|----------------|------------------------|

Product Characteristics

| | |
|---------------------------------------|--|
| Operating Temperature | -40°C to 125°C (Consider re-rating) |
| Thermal Shock | Withstands 5 cycles of – 55°C to 125°C |
| Vibration | Per MIL-STD-202 Method 201 |
| Insulation Resistance (After Opening) | Greater than 10,000 ohms. |

Part Numbering System

