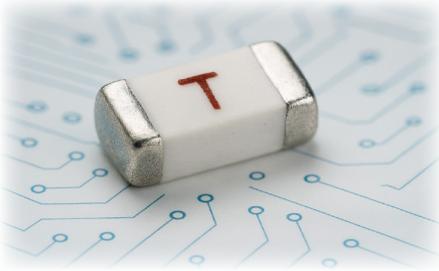


HRF1206SB SolidMatrix Surface Mount Fuse (Slow Blow, 1206 Size)



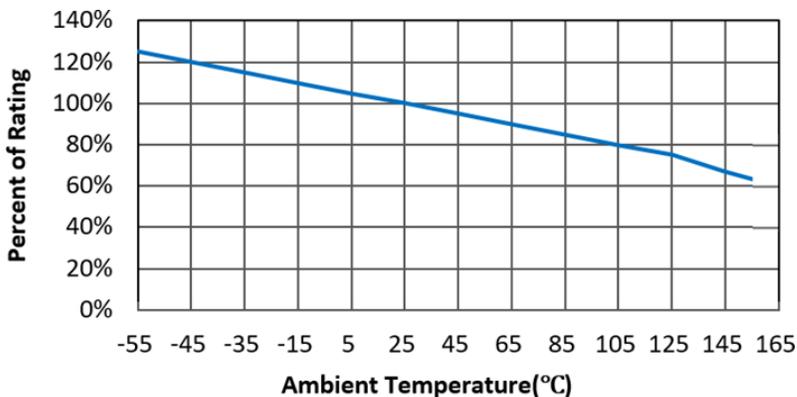
Features

- Tin/Lead (Sn/Pb) solder plated terminals.
- High inrush current withstanding capability.
- Single small case size for current rating from 1A to 8A.
- Multilayer ceramic monolithic body structure.
- Silver fusing element and silver termination with Ni and Sn/Pb solder plating.
- Symmetrical design and reliable functionality throughout prolonged use.

Clearing Time Characteristics

| % Of Current Rating | Clearing Time @25°C | |
|---------------------|---------------------|--------------|
| | Min. | Max. |
| 100% | 4 hours | - |
| 200% | 1 second | 120 seconds |
| 300% | 0.1 seconds | 3 seconds |
| 800% | 0.002 seconds | 0.05 seconds |

Derating Curve

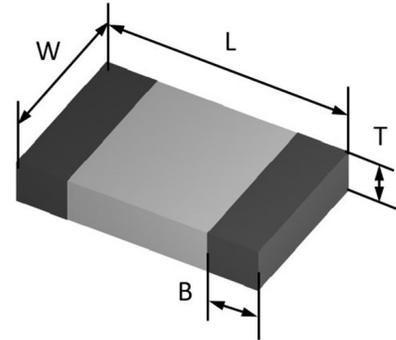


Applications

- Satellite/Spacecraft
- Aerospace
- Avionics
- Military
- Telecom DC/DC power
- Drones
- Battery and BMS
- PDU

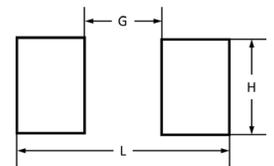
Product Dimensions

| Dimension | Inch | mm |
|-----------|---------------|-------------|
| L | 0.126 ± 0.008 | 3.20 ± 0.20 |
| W | 0.063 ± 0.008 | 1.60 ± 0.20 |
| T | 0.038 ± 0.008 | 0.97 ± 0.20 |
| B | 0.020 ± 0.010 | 0.51 ± 0.25 |



Recommended Land Pattern

| Dimension | 1206 | Unit |
|-----------|-----------------|--------------|
| L | 0.173 (4.40) | Inch (mm) |
| G | 0.059 (1.50) | Inch (mm) |
| H | 0.071 (1.80) | Inch (mm) |



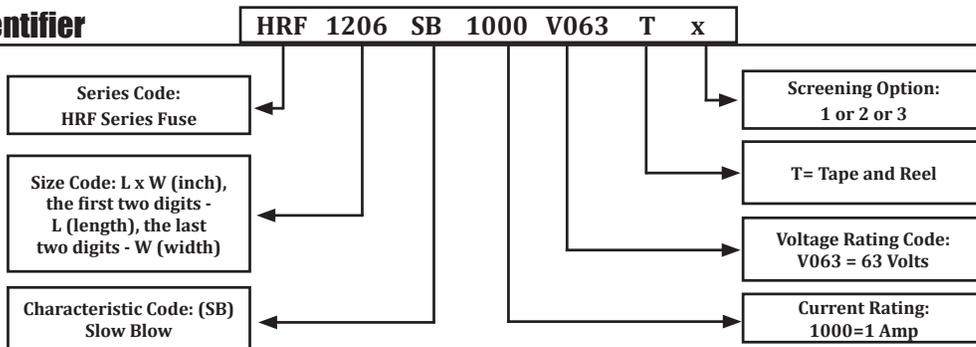
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Electrical Characteristics

| Part Number | Voltage Rating (VDC) | Current Rating (Amps) | Interrupting Rating | Nominal Cold DCR (Ω)/1 | Nominal I ² t (A ² s)/2 | Marking Code/3 |
|---------------------|----------------------|-----------------------|----------------------|------------------------|---|----------------|
| HRF1206SB1000V063Tx | 63 | 1.0 | 50A at rated voltage | 0.360 | 0.11 | E |
| HRF1206SB1250V063Tx | 63 | 1.25 | | 0.200 | 0.22 | F |
| HRF1206SB1500V063Tx | 63 | 1.5 | | 0.150 | 0.23 | G |
| HRF1206SB2000V063Tx | 63 | 2.0 | | 0.088 | 0.63 | I |
| HRF1206SB2500V032Tx | 32 | 2.5 | | 0.065 | 0.90 | J |
| HRF1206SB3000V032Tx | 32 | 3.0 | | 0.034 | 1.20 | K |
| HRF1206SB3500V032Tx | 32 | 3.5 | | 0.028 | 1.60 | L |
| HRF1206SB4000V032Tx | 32 | 4.0 | | 0.024 | 2.20 | M |
| HRF1206SB4500V032Tx | 32 | 4.5 | | 0.020 | 3.60 | T |
| HRF1206SB5000V032Tx | 32 | 5.0 | | 0.018 | 5.30 | N |
| HRF1206SB5500V024Tx | 24 | 5.5 | 60A at rated voltage | 0.014 | 6.40 | U |
| HRF1206SB6000V024Tx | 24 | 6.0 | | 0.011 | 8.50 | O |
| HRF1206SB7000V024Tx | 24 | 7.0 | | 0.010 | 10.0 | P |
| HRF1206SB8000V024Tx | 24 | 8.0 | | 0.009 | 16.9 | R |

1- Measured at ≤10% rated current and 25°C ambient. 2- Melting I²t at 0.001 Second pre-arcing time. 3- Red marking code

Part Number Identifier



Standard Screening Options:

- Standard 100% Visual Inspection per MIL-PRF-23419/14, AS9102 FAIR, MIL-STD-1580 DPA.
- Option 2: Group A and B Screening per MIL-PRF-23419/14, AS9102 FAIR, MIL-STD-1580 DPA (see AEM Detail Specification for more details).
- Option 3: Group A, B, and C Screening per MIL-PRF-23419/14, AS9102 FAIR, MIL-STD-1580 DPA (see AEM Detail Specification for more details).

Termination:

Tin/Lead (Sn/Pb)

General Specification:

- Operating temperature: -55°C to +150°C (With de-rating).
- Storage Temperature: -55°C to +150°C.
- Moisture sensitivity level: MSL=1.



Certified to
AS9100D
ISO 9001:2015



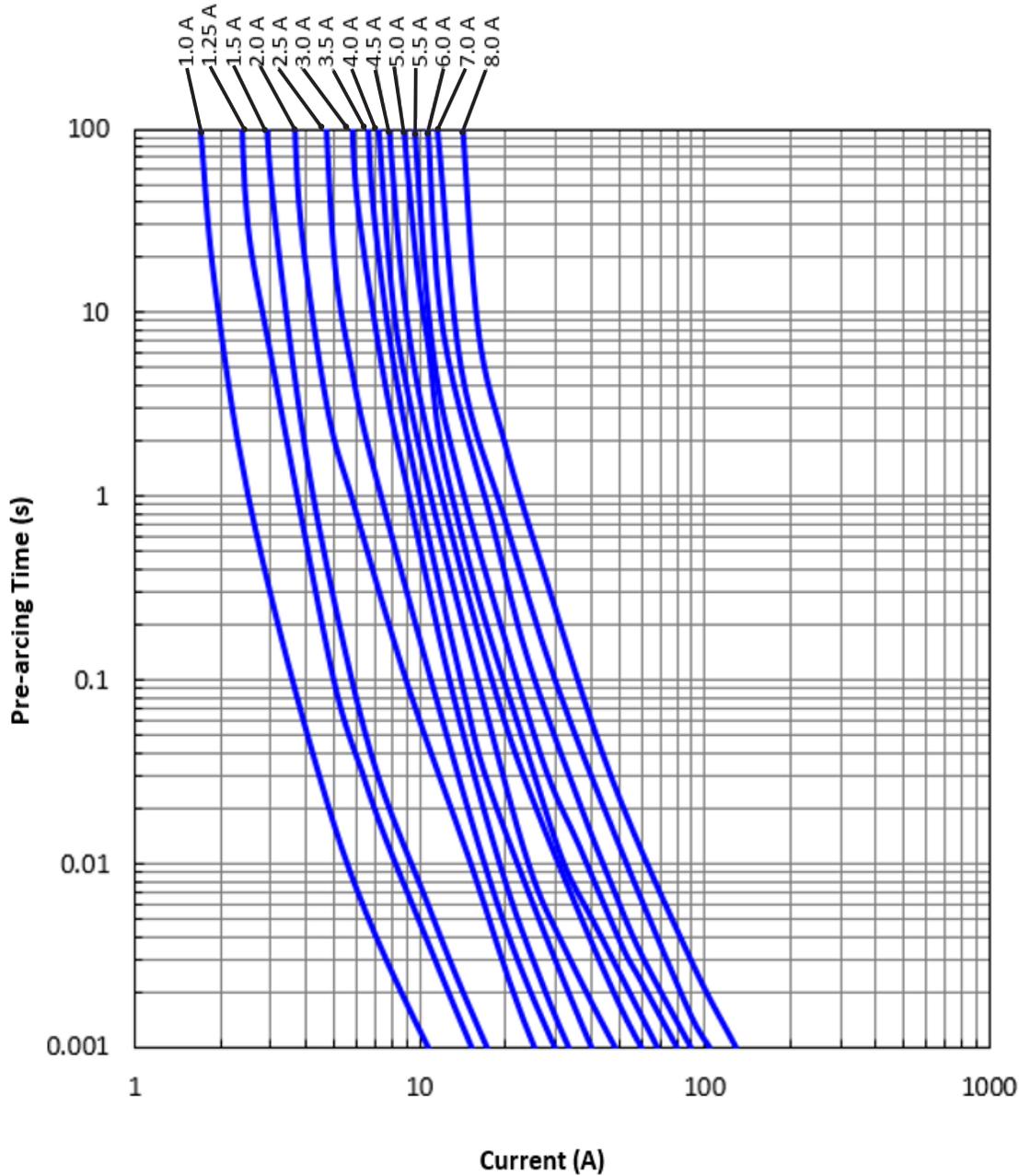
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Reliability Tests:

| No. | Item | Condition | Criteria |
|-----|---------------------------|---|--|
| 1 | Bend | 2 mm bend | DCR change within $\pm 20\%$. ($\pm 10\%$ for $\leq 1A$), no mechanical damage |
| 2 | Solderability | 245°C, 5 seconds | New solder coverage $\geq 95\%$ |
| 3 | Soldering Heat Resistance | 260°C, 60 seconds | DCR change within $\pm 10\%$, new solder coverage 75% minimum, no mechanical damage |
| 4 | Terminal Strength | Gradually apply 0.5 kg force to the side of the part for 60 seconds | DCR change within $\pm 10\%$, no mechanical damage |
| 5 | Life | 80% rated current (75% for $< 1A$), 2000 hours, ambient temperature +20°C to +30°C | Voltage drop change within $\pm 10\%$ |
| 6 | Thermal Shock | -65°C to +150°C, 100 cycles | DCR change within $\pm 10\%$, no mechanical damage |
| 7 | Mechanical Vibration | 5 – 3000 Hz, 0.4 inch double amplitude or 30 G peak | DCR change within $\pm 10\%$, no mechanical damage |
| 8 | Mechanical Shock | 1500 G, 0.5 milliseconds, half-sine shocks | DCR change within $\pm 10\%$, no mechanical damage |
| 9 | Salt Spray | 5% salt solution, 48 hours exposure | DCR change within $\pm 10\%$, no excessive corrosion |
| 10 | Moisture Resistance | 10 cycles | DCR change within $\pm 10\%$, no excessive corrosion |

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Average Pre-arcing Time Curves



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HRF1206SB SolidMatrix Surface Mount Fuse (Slow Blow, 1206 Size)

Average I²t vs. t Curves

