HRF1206FA SolidMatrix Surface Mount Fuse (Fast Acting, 1206 Size)

Applications

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

Features

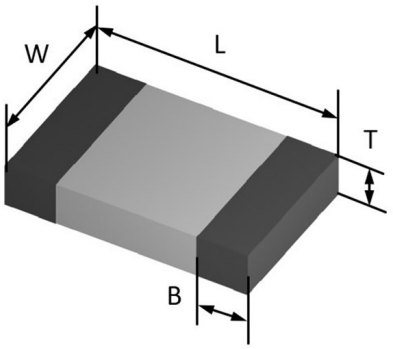
- Tin/Lead (Sn/Pb) solder plated terminals.
- Single small case size for current rating from 0.5A to 8A.
- Multilayer monolithic structure with glass ceramic body.
- Silver fusing element and silver termination with Ni and Sn/Pb solder plating.
- Symmetrical design and reliable functionality throughout prolonged use.
- Compatible with both wave and reflow soldering processes

Product Dimensions

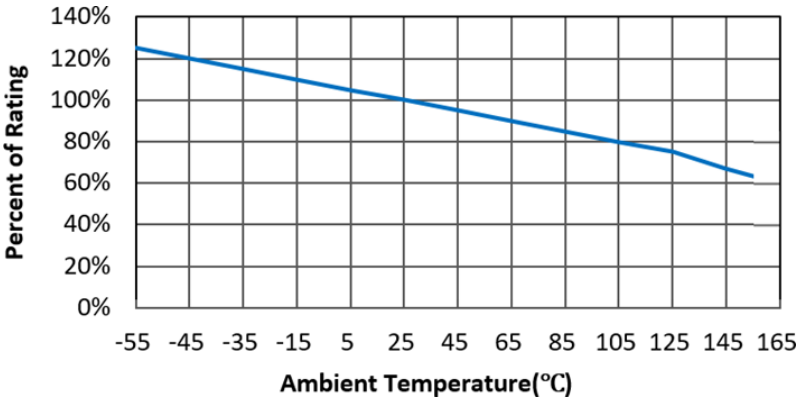
Dimension	Inch	mm
L	0.126 ± 0.008	3.20 ± 0.20
W	0.063 ± 0.008	1.60 ± 0.20
T	0.033 ± 0.008	0.85 ± 0.20
B	0.020 ± 0.010	0.51 ± 0.25

Clearing Time Characteristics

% Of Current Rating	Clearing Time @25°C	
	Min.	Max.
100%	4 hours	-
250%	-	5 seconds
400%	-	0.05 seconds

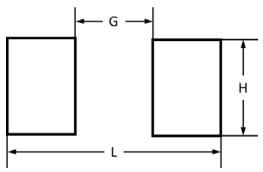


Derating Curve



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)



Certified to AS9100D ISO 9001:2015

MIL-STD-790

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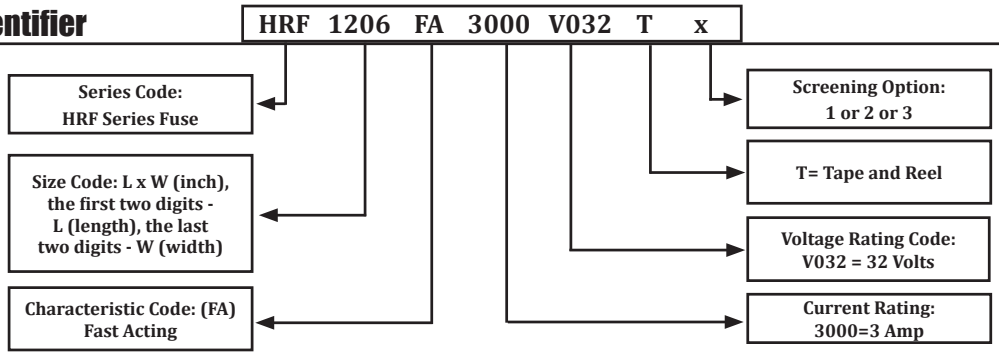
Electrical Characteristics

Part Number	Voltage Rating (VDC)	Current Rating (Amps)	Interrupting Rating	Nominal Cold DCR (Ω)/1	Nominal I^2t (A^2s)/2	Marking Code/3
HRF1206FA0500V063Tx	63	0.5	50A @Rated Voltages	0.730	0.002	C
HRF1206FA0750V063Tx	63	0.75		0.513	0.005	D
HRF1206FA1000V063Tx	63	1.0		0.220	0.011	E
HRF1206FA1500V063Tx	63	1.5		0.120	0.024	G
HRF1206FA1750V063Tx	63	1.75		0.100	0.045	H
HRF1206FA2000V063Tx	63	2.0		0.050	0.075	I
HRF1206FA2500V032Tx	32	2.5		0.035	0.110	J
HRF1206FA3000V032Tx	32	3.0		0.031	0.210	K
HRF1206FA4000V032Tx	32	4.0	45A @Rated Voltages	0.022	0.350	M
HRF1206FA5000V032Tx	32	5.0		0.015	0.600	N
HRF1206FA6000V032Tx	32	6.0	50A @Rated Voltages	0.013	1.000	+
HRF1206FA7000V032Tx	32	7.0		0.011	1.600	-
HRF1206FA8000V032Tx	32	8.0		0.008	2.300	=

1- Measured at ≤10% rated current and 25°C ambient. *2- Melting I^2t at 0.001 Second pre-arcing time.* *3- Black marking code*

Part Number Identifier



Standard Screening Options:

1- Standard 100% Visual Inspection per MIL-PRF-23419/14, AS9102 FAIR, MIL-STD-1580 DPA.
2- 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).
3- 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:

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

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Reliability Tests:

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

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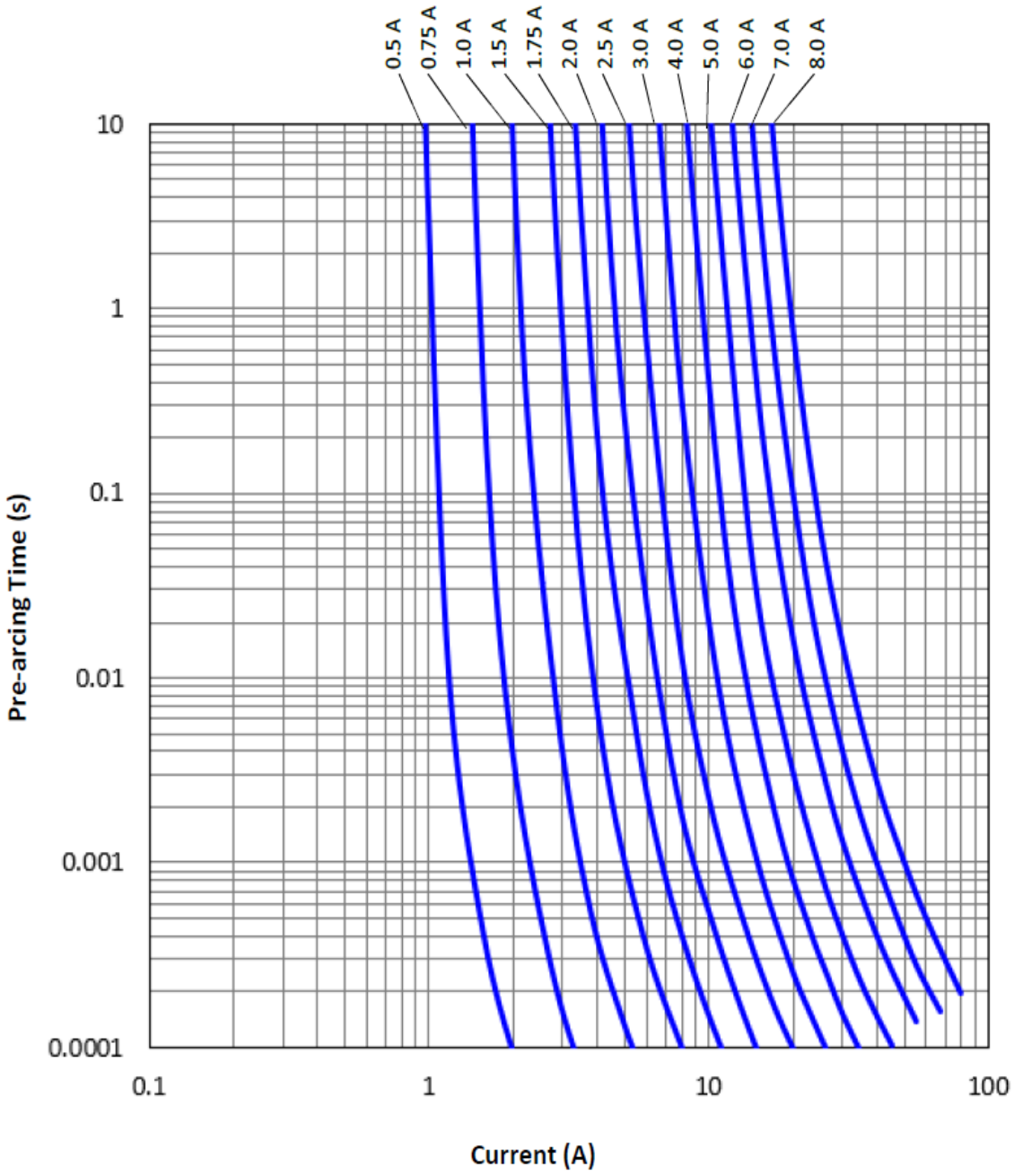
Average Pre-arcing Time Curves



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Average I^2t vs. t Curves