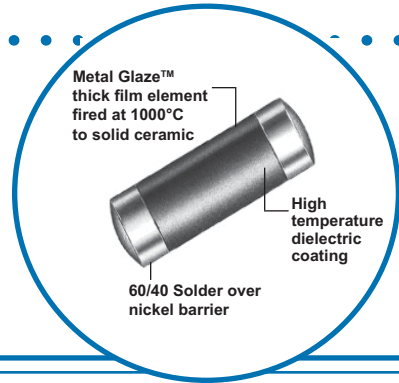


METAL GLAZE™ GENERAL PURPOSE SURFACE MOUNT SURGE RESISTOR

- Up to triple the surge rating of the rugged CHP1
- Replaces costly surface-mount wirewound resistors
- 150°C maximum operating temperature
- 1 Watt power rating
- ROHS - Compatible Components Available



HSF-1 SPECIFICATIONS:

Size Code	Industry Footprint	IRC Type	Maximum Power Rating	Working Voltage	Maximum Voltage	Resistance Range (Ω)	Tolerance (±%)	TCR (ppm/°C)	Product Category
F	2512	HSF-1	1W @ 70°C	350 VDC	1000 VDC	5.9, 6.8, 11, 27, 62, 68, 270	10	±50, ±100	High Surge

Note 1: Consult factory for additional resistance values.
 Note 2: Consider the CHP for pulse applications requiring values greater than 300 Ω.

HSF-1 PERFORMANCE CHARACTERISTICS:

Characteristics	Maximum Change	Test Method
Temperature Coefficient	As specified	MIL-R-55342E Par 4.7.9 (-55°C +125°C)
Thermal Shock	±0.5% +0.01 ohm	MIL-R-55342E Par 4.7.3 (-65°C +150°C, 5 cycles)
Low Temperature Operation	±0.25% +0.01 ohm	MIL-R-55342E Par 4.7.4 (-65°C @ working voltage)
Short Time Overload	±0.5% +0.01 ohm	MIL-R-55342E Par 4.7.5 2.5 x $\sqrt{\quad}$ for 5 seconds
High Temperature Exposure	+0.5 +0.01 ohm	MIL-R-55342E Par 4.7.6 (+150°C for 100 hours)
Resistance to Bonding	±0.25% 0.01 ohm	MIL-R-55342E Par 4.7.7 (Reflow soldered to board at 260°C for 10 seconds)
Exposure	95% minimum coverage	MIL-STD-202, Method 208 (245°C for 5 seconds)
Solderability	±0.5% +0.01 ohm	MIL-R-55342E Par 4.7.8 (10 cycles, total 240 hours)
Moisture Resistance	±0.5% +0.01 ohm	MIL-R-55342E Par 4.7.10 (2000 hour at 70°C intermittent)
Life Test Terminal Adhesion Strength	±1% +0.01 ohm no mechanical damage	1200 gram push from underside of mounted chip for 60 seconds
Resistance to Board Bending	±1% + 0.01 ohm no mechanical damage	Chip mounted in center of 90mm long board, deflected 5mm so as to exert pull on chip contacts for 10 seconds

General Note

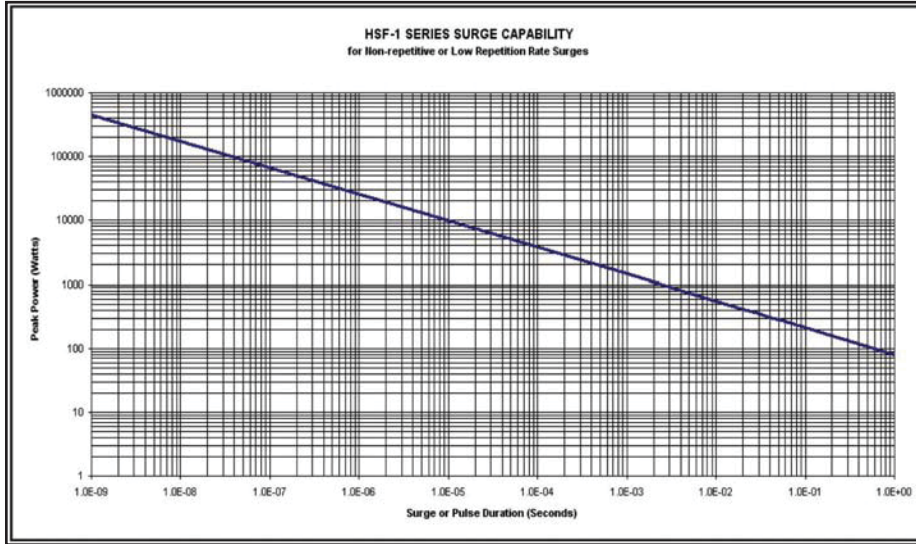
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 Telephone: 361-992-7900 • Facsimile: 361-992-3377 • Website: www.irctt.com

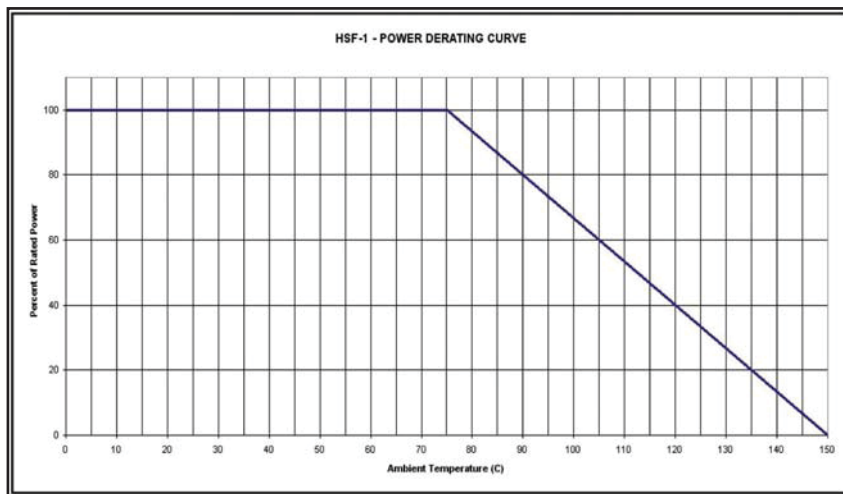


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 Issue October 2008

HSF-1 SURGE CAPABILITY DATA:



HSF-1 POWER DERATING DATA:



Note: Use for low repetitive pulses where the average power dissipation is not to exceed the component rating at 70°C. Surge handling capacity for low-repetitive surges may be significantly greater than shown above. Contact factory

Ordering Data:

Sample Part No.

HSF-1 - 100 - 11R0 - K - LF - 13

IRC Type _____
(HSF-1)

Temperature Coefficient _____
(50 = $\pm 50\text{ppm}/^\circ\text{C}$; 100 = $\pm 100\text{ppm}/^\circ\text{C}$)

Resistance Value _____
Standard 4-digit resistance code. Consult factory for available values.

Tolerance _____
(K = 10%)

Lead-Free Construction _____

Packaging Code _____
(BLK = Bulk, 7=7" Reel, 13=13" Reel)

General Note

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