

Features

- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix Designates Compliant. See Ordering Information)
- Glass Passivated Chip Junction
- Low Profile Package
- For Surface Mount Applications
- High Forward Surge Capability
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Halogen Free. "Green" Device (Note 2)

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance(Note 3): 15°C/W Junction to Case
- Typical Thermal Resistance(Note 3): 20°C/W Junction to Lead
- Typical Thermal Resistance(Note 3): 60°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
S2JBFL	S2J	600V	420V	600V
S2MBFL	S2M	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

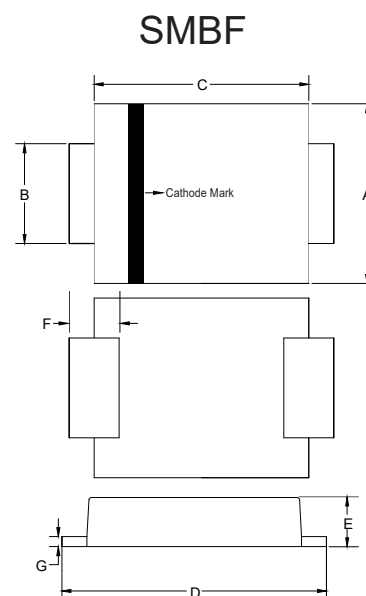
Average Forward Current	$I_{F(AV)}$	2.0A	$T_L=105^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	50A 100A	8.3ms, Half-sine Wave 1ms, Square Wave
Maximum Instantaneous Forward Voltage	V_F	1.1V	$I_F=2.0A$; $T_J=25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5 μA 100 μA	$T_J=25^\circ\text{C}$; $T_J=125^\circ\text{C}$
Typical Junction Capacitance	C_J	12pF	Measured at 1.0MHz $V_R=4.0V$

*Pulse Test: Pulse Width 300 μsec , Duty Cycle 2%

Note:

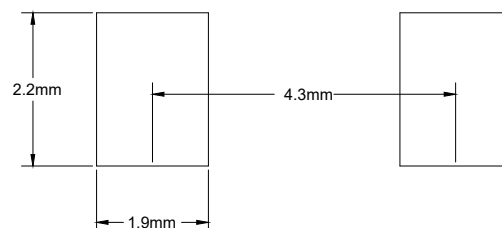
1. High Temperature Solder Exemptions Applied, See EU Directive Annex 7a.
2. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
3. Mounted on P.C.B. with 0.3" x 0.3" (8.0 mm x 8.0 mm) copper pad areas.

2.0 Amp Glass Passivated Silicon Rectifier 600 to 1000 Volts



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.134	0.150	3.40	3.80	
B	0.075	0.083	1.90	2.10	
C	0.163	0.175	4.15	4.45	
D	0.201	0.220	5.10	5.60	
E	0.041	0.061	1.05	1.55	
F	0.028	0.053	0.70	1.35	
G	0.006	0.010	0.15	0.25	

Suggested Solder Pad Layout



Curve Characteristics

Fig. 1 - Forward Current Derating Curve

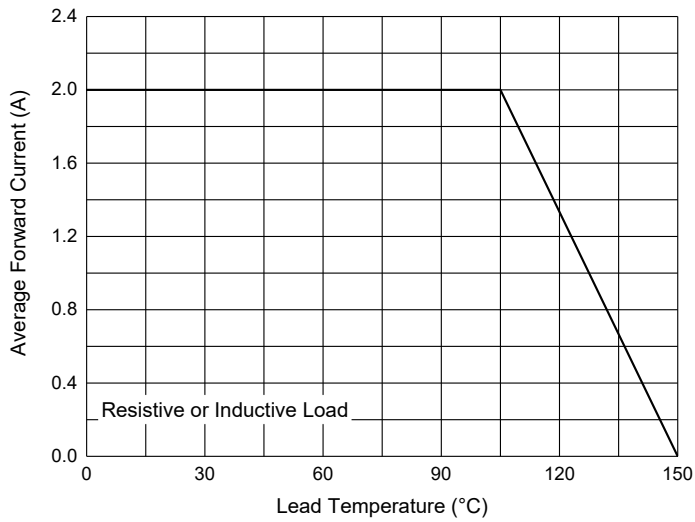


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

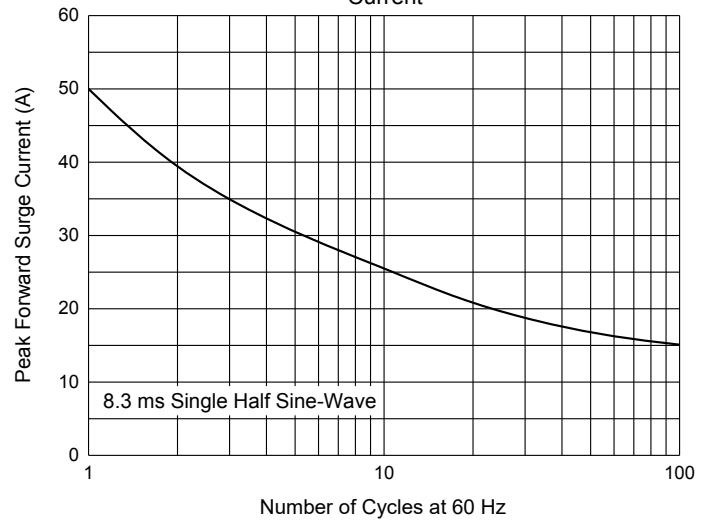


Fig. 3 - Typical Instantaneous Forward Characteristics

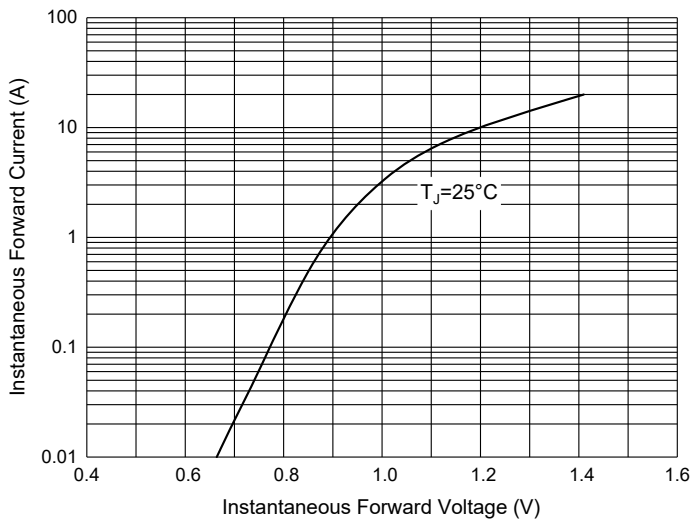
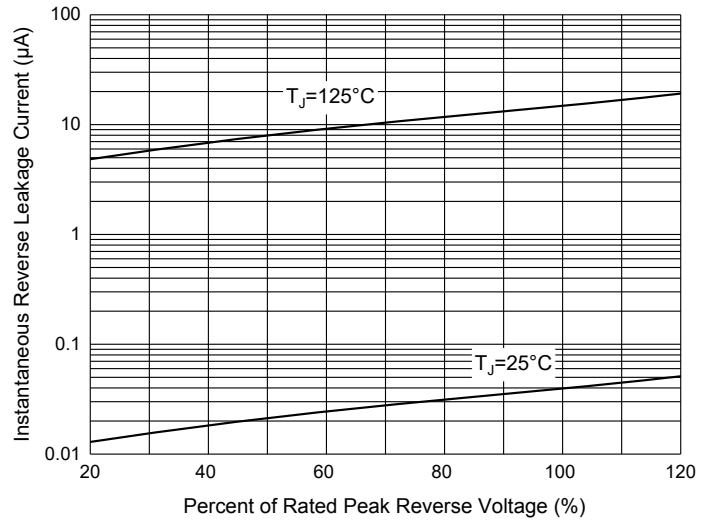


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

Device	Packing
S2JBFL-TP~S2MBFL-TP	Tape&Reel: 5Kpcs/Reel

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