

	E502650
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Features

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Surface Mount Package
- Low Profile Package

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 15°C/W Junction to Lead
- Typical Thermal Resistance: 40°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SDB201	SDB201	50V	35V	50V
SDB202	SDB202	100V	70V	100V
SDB203	SDB203	200V	140V	200V
SDB204	SDB204	400V	280V	400V
SDB205	SDB205	600V	420V	600V
SDB206	SDB206	800V	560V	800V
SDB207	SDB207	1000V	700V	1000V

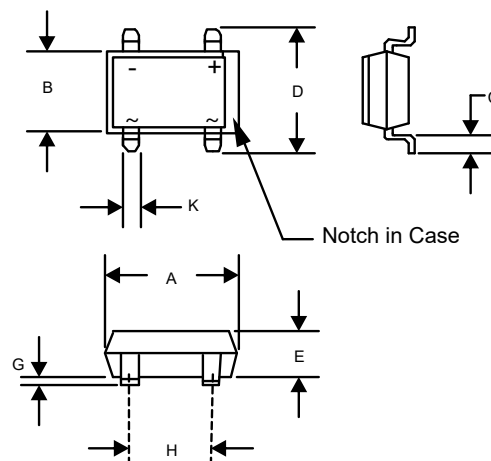
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	2.0A	$T_A = 40^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	60A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	V_F	1.2V	$I_F = 2.0\text{A}$ $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	10µA 0.5mA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Typical Junction Capacitance	C_J	25pF	Measured at 1.0MHz, $V_R=4.0\text{V}$
Rating For Fusing	I^2t	14.9A ² s	$t < 8.3\text{ms}$

Note: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7a.

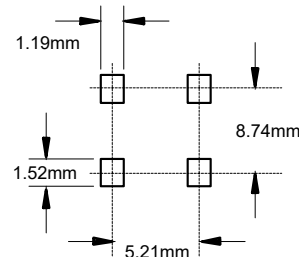
2 Amp Single Phase Glass Passivated Bridge Rectifier 50 to 1000 Volts

SDB-1



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.316	0.335	8.05	8.51	
B	0.245	0.255	6.20	6.50	
C	0.040	0.060	1.02	1.50	
D	0.360	0.410	9.40	10.40	
E	0.102	0.130	2.60	3.30	
G	0.003	0.013	0.076	0.33	
H	0.195	0.205	5.00	5.20	
K	0.038	0.047	1.00	1.20	

Suggested Solder Pad Layout



Curve Characteristics

Fig. 1 - Forward Current Derating Curve

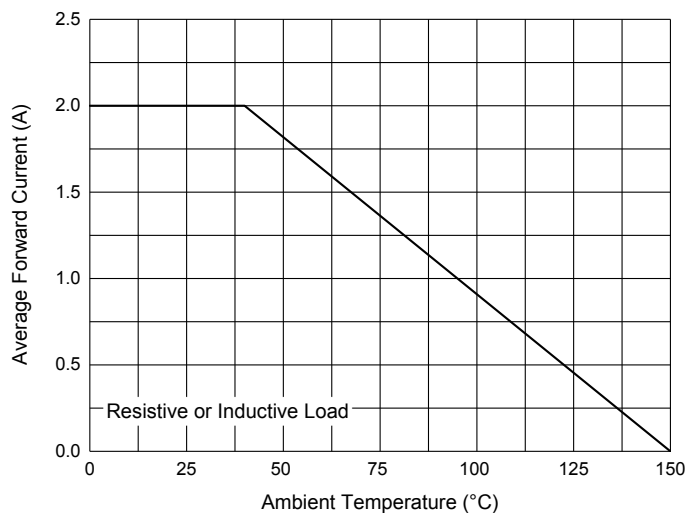


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

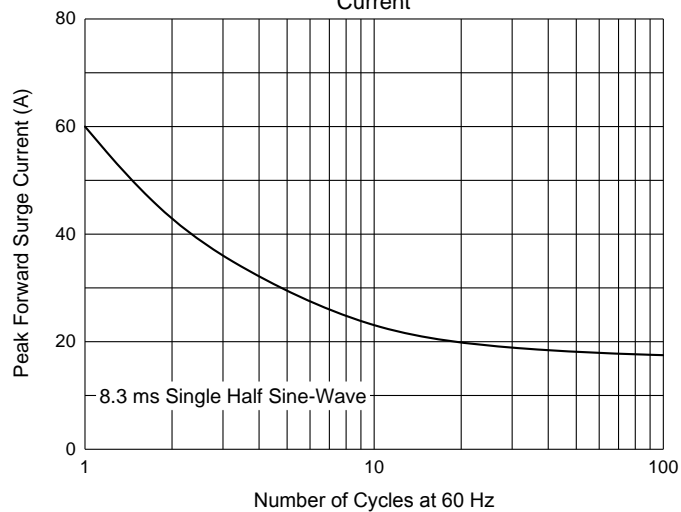


Fig. 3 - Typical Instantaneous Forward Characteristics

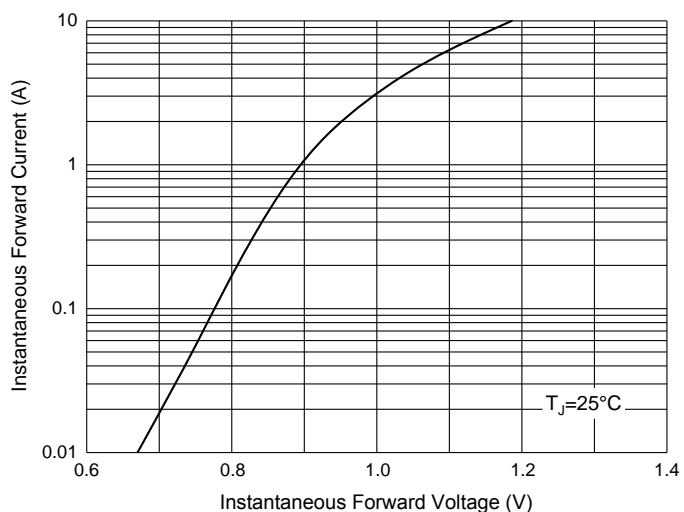
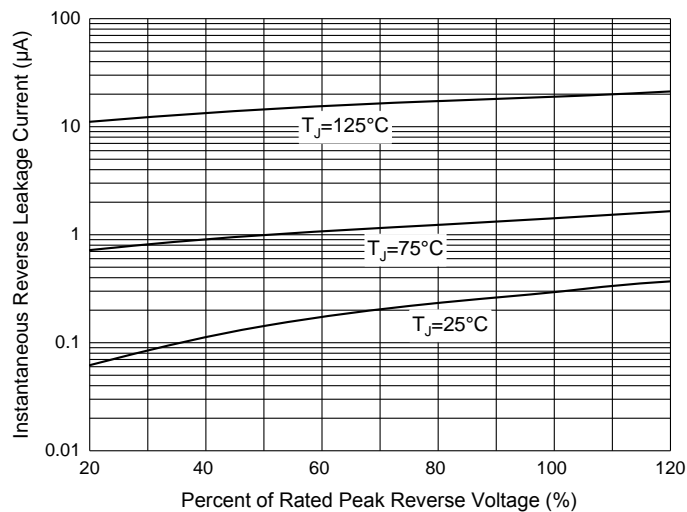


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel;1.5Kpcs/Reel
Part Number-BP	Bulk; 5K/Box

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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