

	<b>E502650</b>
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**Features**

- Halogen Free. "Green" Device (Note 1)
- Glass Passivated Junction
- High Surge Current Capability
- Lead Free Finish/RoHS Compliant (Note2) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

**Maximum Ratings**

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

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
DB101	DB101	50V	35V	50V
DB102	DB102	100V	70V	100V
DB103	DB103	200V	140V	200V
DB104	DB104	400V	280V	400V
DB105	DB105	600V	420V	600V
DB106	DB106	800V	560V	800V
DB107	DB107	1000V	700V	1000V

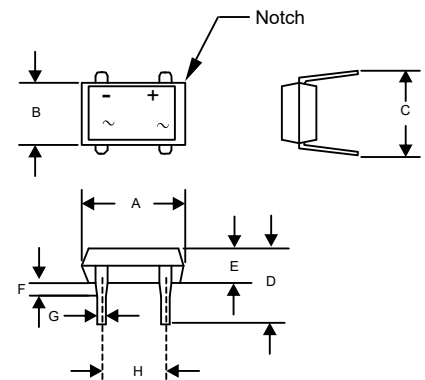
**Electrical Characteristics @ 25°C Unless Otherwise Specified**

Average Forward Current	$I_{F(AV)}$	1.0A	$T_A = 40^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	30A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	$V_F$	1.1V	$I_{FM} = 1.0\text{A}; T_J = 25^\circ\text{C}$
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	10µA 500µA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Typical Junction Capacitance	$C_J$	25pF	Measured at 1.0MHz, $V_R = 4.0\text{V}$
Rating for Fusing	$I^2t$	3.735A <sup>2</sup> s	

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.  
2. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.

**1 Amp Single  
Phase Glass  
Passivated Bridge  
Rectifier  
50 - 1000 Volts**

**DB-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	0.300	0.350	7.60	8.90	
D	0.236	0.299	6.01	7.60	
E	0.102	0.130	2.60	3.30	
F	0.060		1.50		Typ
G	0.016	0.022	0.41	0.56	Typ
H	0.195	0.205	5.00	5.20	

## Curve Characteristics

Fig. 1 - Forward Current Derating Curve

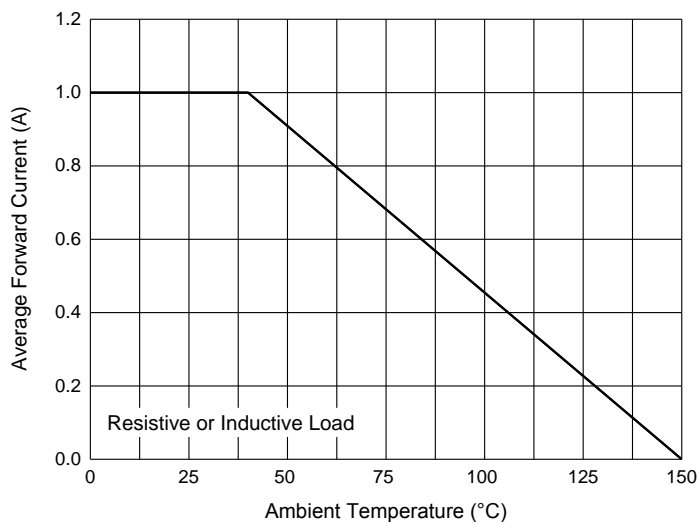


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

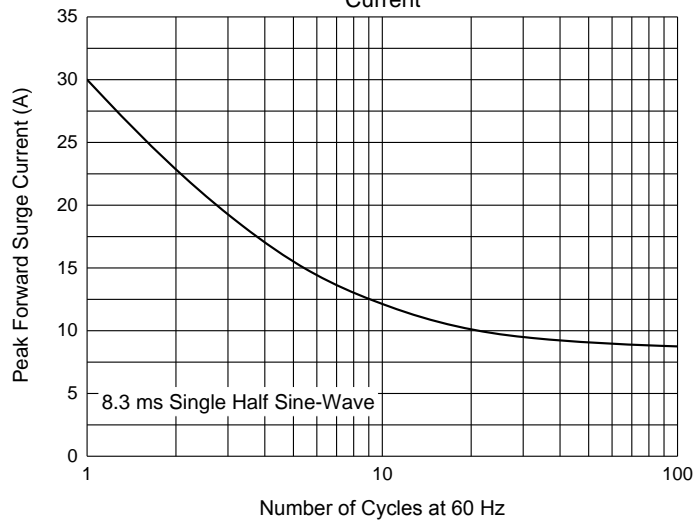


Fig. 3 - Typical Instantaneous Forward Characteristics

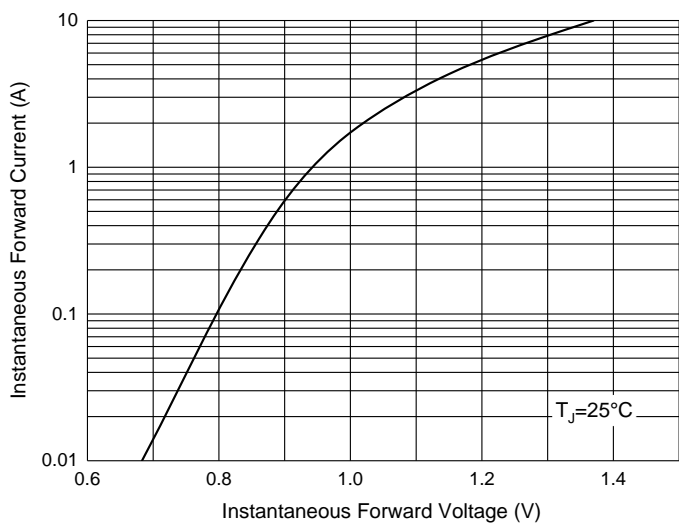
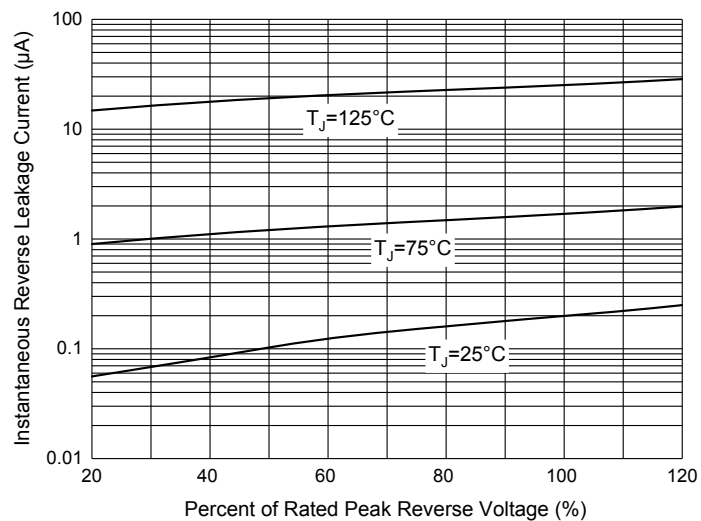


Fig. 4 - Typical Reverse Leakage Characteristics



## Ordering Information

Device	Packing
Part Number-BP	Bulk:50pcs/Tube,2500pcs/Box,10Kpcs/Carton

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