	E502650

4.0 Amp Glass Passivated Bridge Rectifier 1000 Volts

Features

- Lead Free Finish/RoHS Compliant (Note1) ("P"Suffix Designates Compliant. See Ordering Information)
- Halogen Free. “Green” Device (Note 2)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Glass Passivated Chip Junction

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 5 °C/W Junction to Case
- Thermal Resistance: 45 °C/W Junction to Ambient

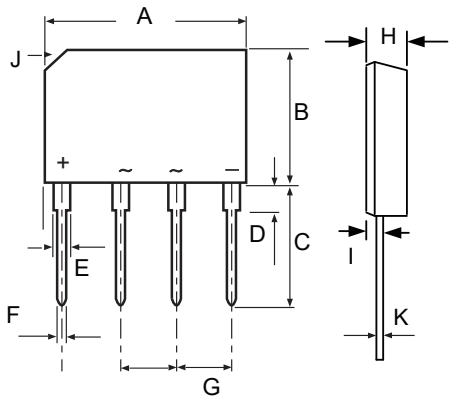
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
KBP410GS	KBP410GS	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

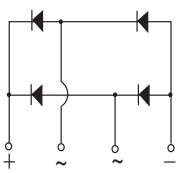
Average Forward Current	$I_{F(AV)}$	4.0A	T_C= 110°C
Peak Forward Surge Current	I_{FSM}	110A	8.3ms, Half Sine
Maximum Forward Voltage Drop Per Element	V_F	1.0V	I_{FM} = 2A Per Element; T_J= 25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5μA 100uA	T_J = 25°C T_J = 125°C
Dielecric Strength	V_{ISO}	2KV	Terminals to Case, AC 1 Minute
Rating for Fusing	I^2t	50 A^2s	t<8.3ms
Typical Junction Capacitance	C_J	35 pF	Measured at 1.0MHz, V_R=4.0V

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

GBP



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.561	0.580	14.25	14.75	
B	0.406	0.417	10.10	10.60	
C	0.561	0.581	14.25	14.73	
D	0.071	0.087	1.80	2.20	
E	0.046	0.056	1.17	1.42	
F	0.030	0.034	0.76	0.86	
G	0.140	0.160	3.56	4.06	
H	0.131	0.161	3.35	4.10	
I	0.031	0.043	0.80	1.10	
J	0.106 X 45°		2.70 X 45°		
K	0.012	0.025	0.30	0.64	



Case Type

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

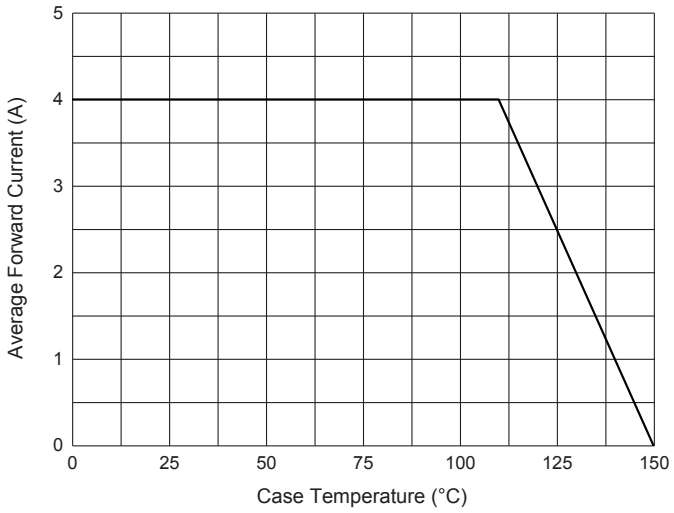


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

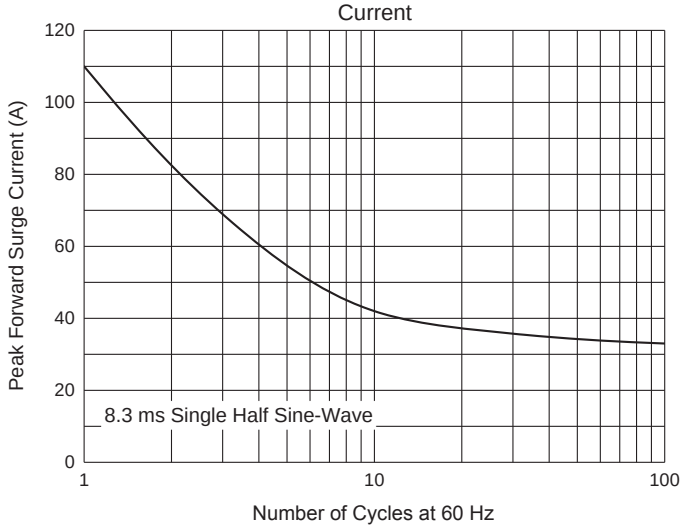


Fig. 3 - Typical Instantaneous Forward Characteristics

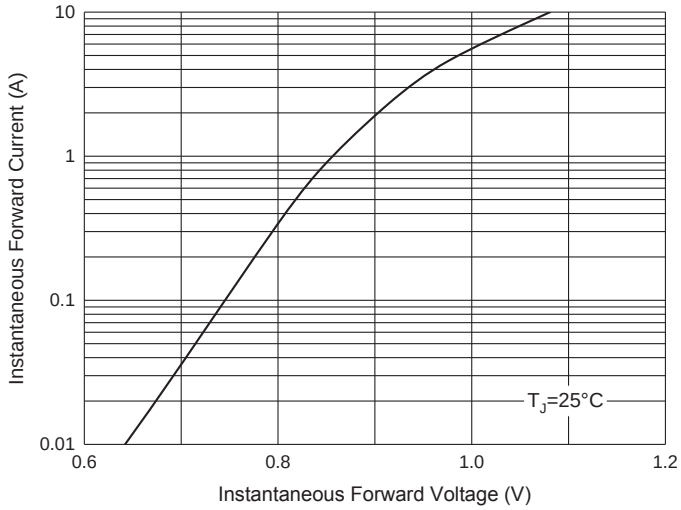
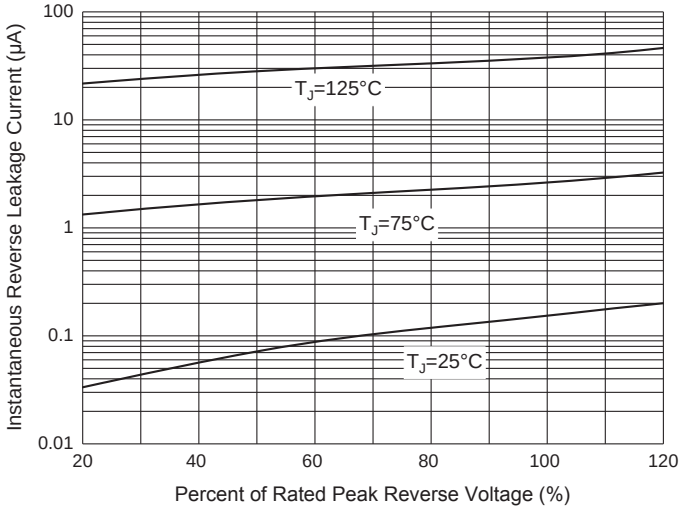


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

Device	Packing
Part Number-BP	Bulk:35pcs/Tube,2100pcs/Box,4200pcs/Carton

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