



Features

- Halogen Free. "Green" Device (Note 1)
- Glass Passivated Chip Junction
- · High Surge Forward Current Capability
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant (Note 2)("P" Suffix Designates RoHS Compliant. See Ordering Information)

10 Amp Bridge Rectifiers 1000 Volts

Maximum Ratings @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}		
Working Peak Reverse Voltage	V_{RWM}	1000	V
DC Blocking Voltage	V_R		
RMS Reverse Voltage	V_{RMS}	700	V
Average Rectified Forward Current @ T _C =105°C (With Heatsink)		10	А
Average Rectified Forward Current @ T _a =25°C (Without Heatsink)	I _{F(AV)}	2.5	A
Non-Repetitive Peak Surge Current @ 8.3ms Half Sine Wave	1	175	А
Non-Repetitive Peak Surge Current @ 1ms Square Wave	I _{FSM}	350	A
l²t Rating for Fusing @1ms≤t≤8.3ms	I ² t	127	A ² s
Dielectric strength @Terminals to Case, AC 1 Minute	V _{dis}	2.0	KV

DIMENSIONS						
DIM	INCHES		MM		NOTE	
DIIVI	MIN	MAX	MIN	MAX	NOIL	
Α	0.772	0.803	19.60	20.40		
В	0.453	0.484	11.50	12.30		
С	0.398	0.429	10.10	10.90		
D	0.039	0.051	1.00	1.30		
E	0.559	0.591	14.20	15.00		
F	0.192	0.208	4.88	5.28		
Н	0.122	0.146	3.10	3.70		
I	0.116	0.132	2.95	3.35		
J	0.209	0.232	5.30	5.90		
K	0.028	0.051	0.70	1.30		
L	0.012	0.024	0.30	0.60		
М	0.067	0.083	1.70	2.10		

Internal Structure

Simplified Outline	Graphic Symbol	
MCC GBUA10M 🔊		
- ~ ~ + 	→	

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.



Thermal characteristics

Symbol	Parameter	Conditions	Min	Тур	Max	Unit
T _J	Operating Junction Temperature Range		-55		150	°C
T _{stg}	Storage Temperature Range		-55		150	°C
Rth _(J-C)	Thermal Resistance from Junction to Case	Note 1		2.2		°C/W
Rth _(J-A)	Thermal Resistance from Junction to Ambient	Without Heatsink		30		°C/W

Note:

Mechanical Data

Recommended Mounting Torque: 0.5 N•m

Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Test Conditions	Min	Тур	Max	Unit
Forward Voltage	V _F	I _F =5A;T _J =25°C			1.0	V
Reverse Current	I _R	at Rated $V_R;T_J=25^{\circ}C$ at Rated $V_R;T_J=125^{\circ}C$			5 100	uA
Junction Capacitance	Сл	V _R =4V;f=1MHz;T _J =25°C		50		pF

^{1.}Device mounted on 75mm x 45mm x 5.5mm aluminum plate heatsink.

100



Curve Characteristics

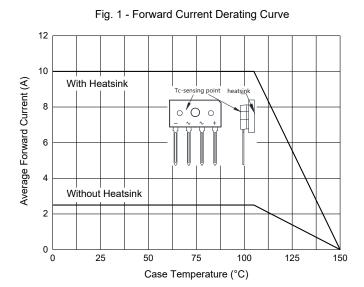


Fig. 3 - Typical Forward Characteristics

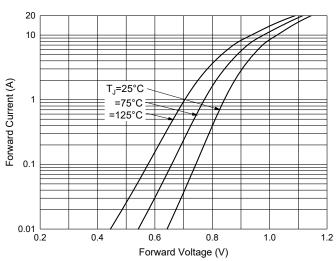


Fig. 5 - Typical Capacitance Characteristics

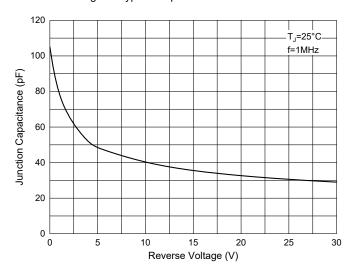


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge
Current

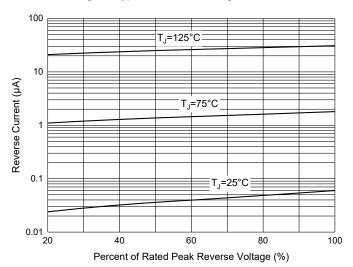
(V)
150
8.3 ms Single Half Sine-Wave

0

Fig. 4 - Typical Reverse Leakage Characteristics

10

Number of Cycles at 60 Hz





Ordering Information

Device	Packing
Part Number-BP	Bulk:25pcs/Tube,625pcs/Box,5000pcs/Carton

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