Features

- Metal of Silicon Rectifier, Majority Carrier Conduction
- Guard Ring For Transient Protection
- Low Power Loss High Efficiency
- High Surge Capacity, High Current Capability
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability RatingHalogen Free Available Upon Request By Adding Suffix "-HF"

10 Amp Schottky Barrier Rectifier 80 to 100 Volts

Maximum Ratings

- Mounting Torgue: 5 in-lbs Maximum
- Operating Junction Temperature Range: -55ºC to +150ºC
- Storage Temperature Range: -55ºC to +175ºC
- Thermal Resistance 2.0°C/W Junction to Case

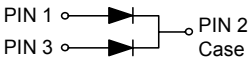
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR1080CT	MBR1080CT	80V	56V	80V
MBR10100CT	MBR10100CT	100V	70V	100V

Electrical Characteristics @ 25°C Unless Otherwise Specified

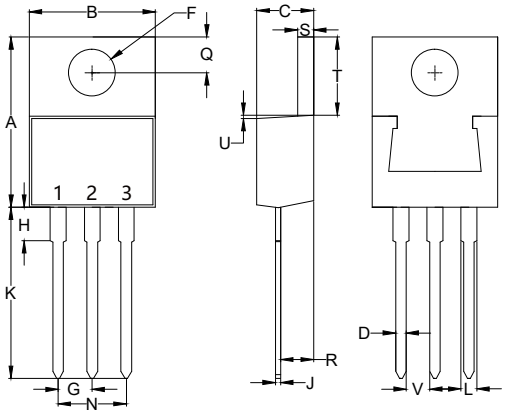
Average Forward Current	$I_{F(AV)}$	10A	T_C=100ºC
Peak Forward Surge Current	I_{FSM}	120A	8.3ms,Half Sine
Maximum Forward Voltage Drop Per Element	V_F	0.85V 0.75V	I_{FM}=5A T_J=25ºC T_J=125ºC
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	0.1mA 10mA	T_J=25ºC; T_J=125ºC
Typical Junction Capacitance	C_J	300pF	Measured at 1.0MHz, V_R=4.0V

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

Internal Structure



TO-220AB



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.560	0.625	14.22	15.88	
B	0.380	0.429	9.65	10.90	
C	0.140	0.201	3.56	5.10	
D	0.020	0.045	0.51	1.14	
F	0.131	0.170	3.34	4.31	Φ
G	0.079	0.121	2.01	3.07	
H	-----	0.250	-----	6.35	
J	0.011	0.025	0.28	0.64	
K	0.500	0.580	12.70	14.73	
L	0.045	0.060	1.14	1.52	
N	0.158	0.242	4.02	6.14	
Q	0.087	0.135	2.22	3.43	
R	0.080	0.126	2.04	3.19	
S	0.045	0.055	1.14	1.39	
T	0.230	0.270	5.84	6.86	
U	-----	0.050	-----	1.27	
V	0.045	-----	1.15	-----	

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

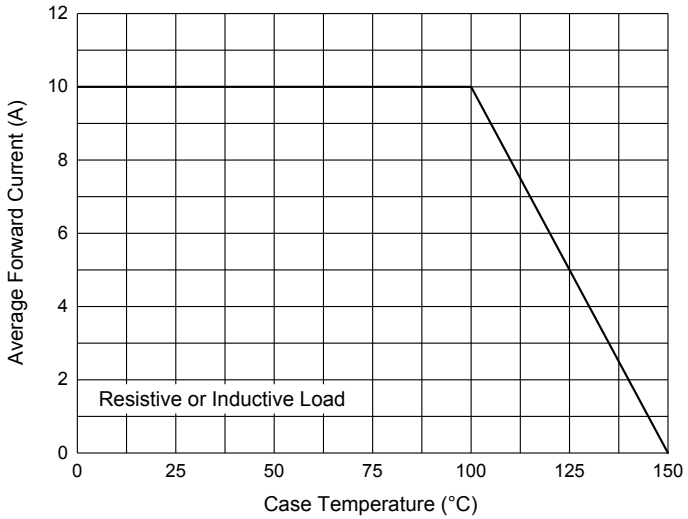


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

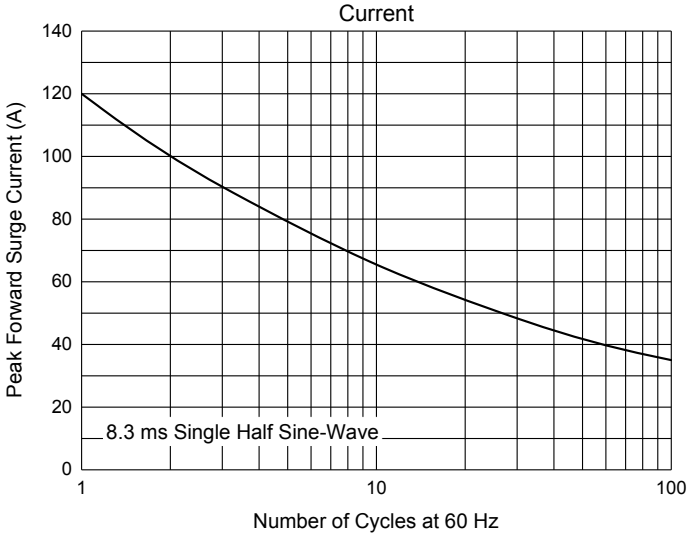


Fig. 3 - Typical Instantaneous Forward Characteristics

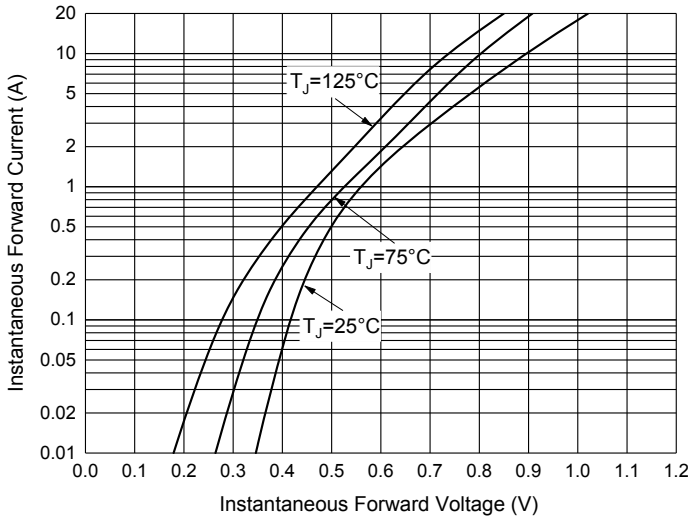
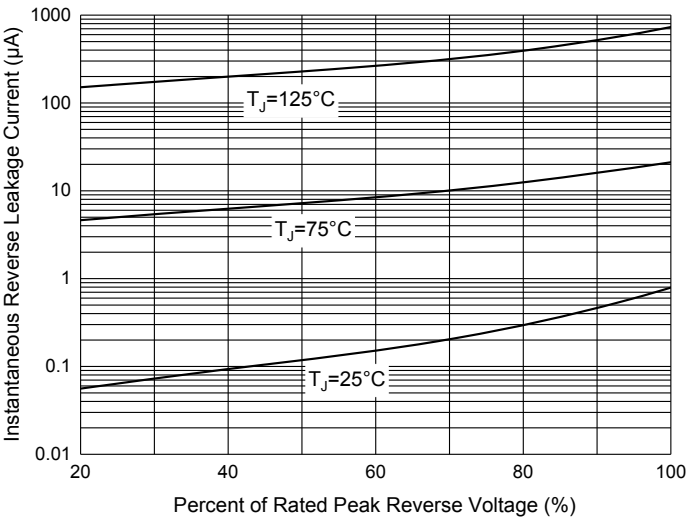


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

Device	Packing
Part Number-BP	Bulk:50pcs/Tube,1Kpcs/Box,5Kpcs/Carton

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

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