

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"

Maximum Ratings

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

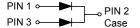
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR1080CT	MBR1080CT	80V	56V	80V
MBR10100CT	MBR10100CT	100V	70V	100V

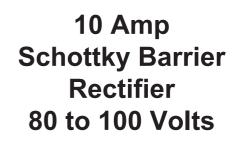
Electrical Characteristics @ 25°C Unless Otherwise Specified

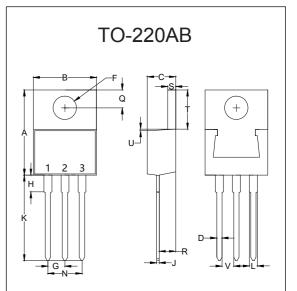
Average Forward Current	I _{F(AV)}	10A	T _C =100⁰C
Peak Forward Surge Current	I _{FSM}	120A	8.3ms,Half Sine
Maximum Forward Voltage Drop Per Element	V _F	0.85V 0.75V	I _{FM} =5A T _J =25°C T _J =125°C
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	0.1mA 10mA	Tյ=25⁰C; Tյ=125⁰C
Typical Junction Capacitance	CJ	300pF	Measured at 1.0MHz, V _R =4.0V

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

Internal Structure



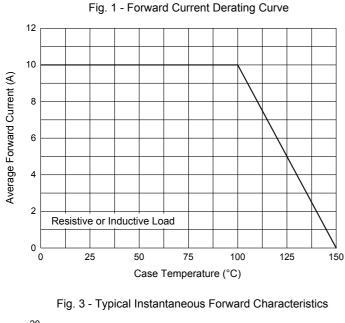


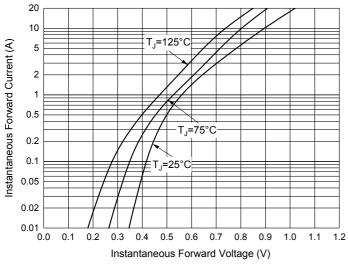


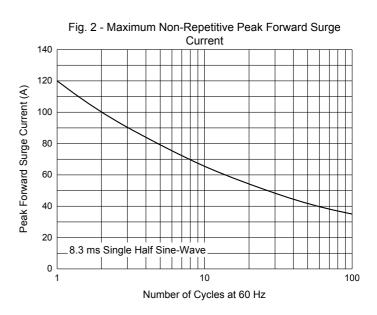
DIM	INC	INCHES		М	NOTE
	MIN	MAX	MIN	MAX	NOTE
А	0.560	0.625	14.22	15.88	
В	0.380	0.429	9.65	10.90	
С	0.140	0.201	3.56	5.10	
D	0.020	0.045	0.51	1.14	
F	0.131	0.170	3.34	4.31	Φ
G	0.079	0.121	2.01	3.07	
Н		0.250		6.35	
J	0.011	0.025	0.28	0.64	
Κ	0.500	0.580	12.70	14.73	
L	0.045	0.060	1.14	1.52	
Ν	0.158	0.242	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	
Т	0.230	0.270	5.84	6.86	
U		0.050		1.27	
V	0.045		1.15		

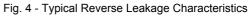


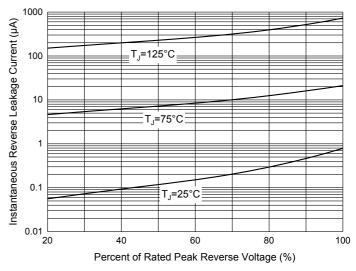
Curve Characteristics













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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