

Features

- High Current Capability and High Efficiency
- High Junction Temperature Capability
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates RoHS Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +175°C
- Storage Temperature Range: -55°C to +175°C
- Maximum Thermal Resistance(Per Leg): 2.0°C/W Junction to Case

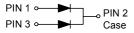
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR40100CTH	MBR40100CTH	100V	70V	100V

Electrical Characteristics @ 25°C Unless Otherwise Specified

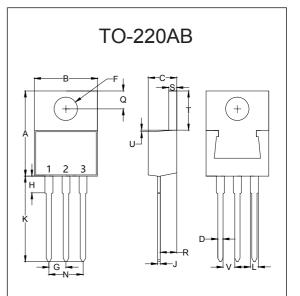
Average Forward Current	I _{F(AV)}	40A	T _C =130°C
Peak Forward Surge Current(Per Leg)	I _{FSM}	250A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage	V _F	0.85V 0.79V(Typ.) 0.75V	I _{FM} =20A; T _A =25°C I _{FM} =20A; T _A =125°C
Maximum Peak Reverse Current	I _R	0.01mA 10mA	T _A =25°C; T _A =125°C

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

Internal Structure



40 Amp Schottky Barrier Rectifier 100 Volts



DIMENSIONS						
DIM	INCHES		MM		NOTE	
DIIVI	MIN	MAX	MIN	MAX	NOTE	
Α	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	Ф	
G	0.079	0.121	2.01	3.07		
Н		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		
Т	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 50 40 Average Forward Current (A) Rated VR-20Khz Square Wave - 50% Duty Cycle 35 70 105 175 Case Temperature (°C)

Fig. 3 - Typical Reverse Leakage Characteristics 10000

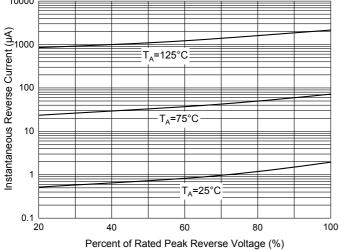
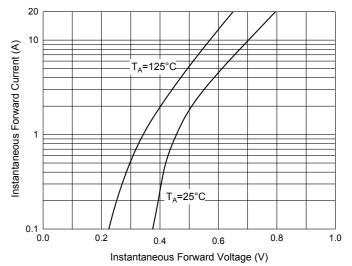


Fig. 2 - Typical Instantaneous Forward Characteristics





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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