Features

- Low Power Loss, High Efficiency
- Guardring for Overvoltage Protection
- Low Forward Voltage Drop And High Frequency Operation
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Epoxy Meets UL 94 V-0 Flammability Rating

30 Amp Schottky Barrier Rectifier 200 Volts

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Mounting Torgue: 5 in-lbs Maximum
- Typical Thermal Resistance Per Leg : 1.7°C/W Junction to Case

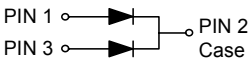
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR30200CT	MBR30200CT	200V	140V	200V

Electrical Characteristics @ 25°C Unless Otherwise Specified

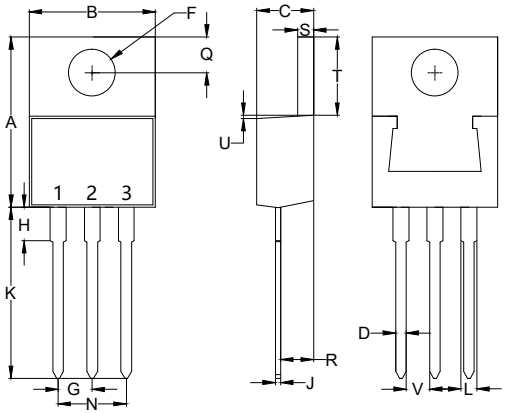
Maximum Average Forward Rectified Current	$I_{F(AV)}$	30A 15A	(See Fig.1)
Peak Forward Surge Current	I_{FSM}	200A	8.3ms,Half Sine
Peak Repetitive Reverse Current Per Leg	I_{RRM}	1.0A	tp = 2.0us, 1KHz
Voltage Rate of Change (Rated V_R)	dv/dt	10,000V/us	
Maximum Instantaneous Forward Voltage Per Leg (Note 5)	V_F	0.95V 0.75V 0.99V 0.86V	I_F=15A,T_J=25°C I_F=15A,T_J=125°C I_F=30A,T_J=25°C I_F=30A,T_J=125°C
Maximum Reverse Current Per Leg at Working Peak Reverse Voltage	I_R	0.1mA 1.0mA	T_J=25ºC T_J=125ºC
RMS Isolation Voltage (MBRF Type Only) from Terminals to Heatsink With t = 1.0 Second, RH≤30%	V_{ISOL}	4500V 3500V 1500V	(Note 2) (Note 3) (Note 4)

Note :1. High Temperature Solder Exemption Applied, see EU Directive Annex 7.
2. Clip mounting (on case), where lead does not overlap heatsink with 0.110" offset
3. Clip mounting (on case), where leads do overlap heatsink
4. Screw mounting with 4-40 screw, where washer diameter is < 4.9 mm (0.19")
5. Pulse test: 300us pulse width, 1% duty cycle

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

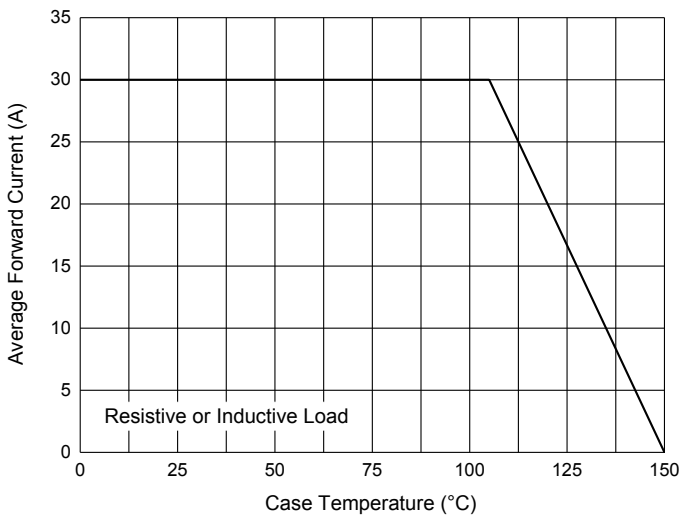


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

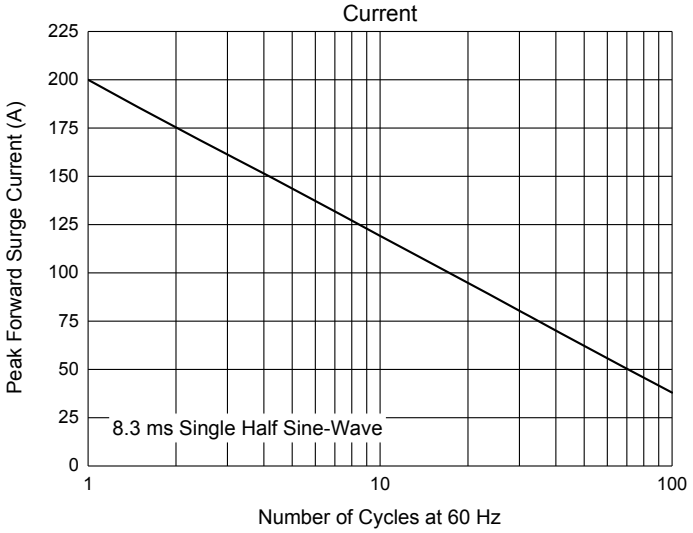


Fig. 3 - Typical Instantaneous Forward Characteristics

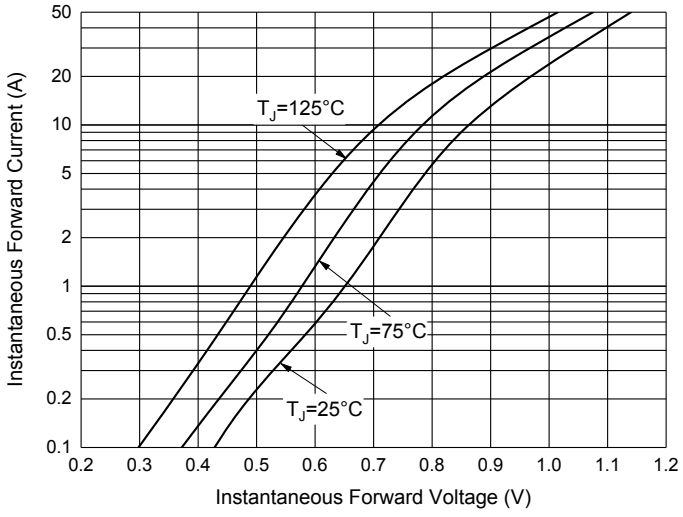
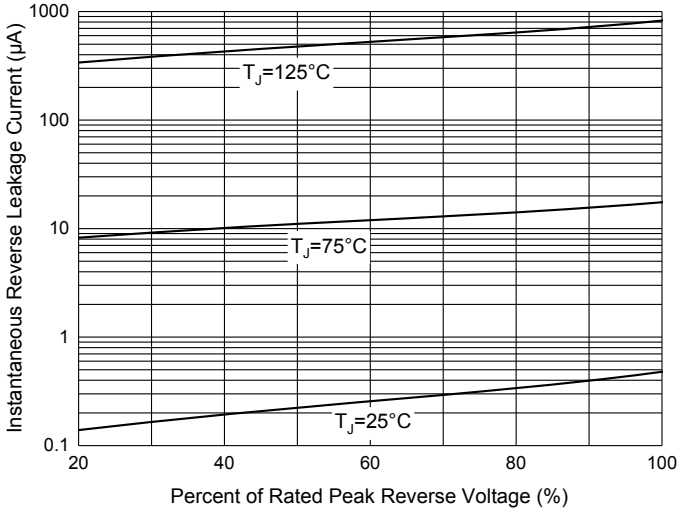


Fig. 4 - Typical Reverse Leakage Characteristics



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