

Features

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

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
- Typical Thermal Resistance: 1.5°C/W Junction to Case

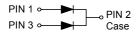
	MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
ĺ	MBR1520CT	MBR1520CT	20V	14V	20V
ĺ	MBR1530CT	MBR1530CT	30V	21V	30V
	MBR1535CT	MBR1535CT	35V	24.5V	35V
	MBR1540CT	MBR1540CT	40V	28V	40V
	MBR1545CT	MBR1545CT	45V	31.5V	45V
	MBR1560CT	MBR1560CT	60V	42V	60V
ĺ	MBR1580CT	MBR1580CT	80V	56V	80V
İ	MBR15100CT	MBR15100CT	100V	70V	100V

Electrical Characteristics @ 25°C Unless Otherwise Specified

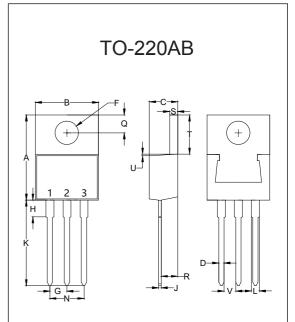
Average Forward Current	$I_{F(AV)}$	15A	T _C =125°C		
Peak Forward Surge Current	I _{FSM}	150A	8.3ms,Half Sine		
Maximum Instantaneous Forward Voltage					
MBR1520CT-45CT	V_{F}	0.65V	I _{FM} =7.5A		
MBR1560CT		0.75V	T _J =25°C		
MBR1580CT-100CT		0.85V			
Maximum Instantaneous Forward Voltage					
MBR1520CT-45CT	V_{F}	0.84V	I _{FM} =15A		
MBR1560CT	·	0.90V	T _J =25°C		
MBR1580CT-100CT		0.95V			
Maximum Reverse					
Current at DC Blocking					
Voltage					
MBR1520CT-60CT	I_R		Т _J =25°С;		
MBR1580CT-100CT		0.01mA			
MBR1520CT-60CT		20mA	T _J =100°C		
MBR1580CT-100CT		2mA			
Maximum Reverse Current at DC Blocking Voltage MBR1520CT-60CT MBR1580CT-100CT MBR1520CT-60CT	I _R	0.1mA 0.01mA 20mA	•		

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

Internal Structure



15 Amp Schottky Barrier Rectifier 20 to 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

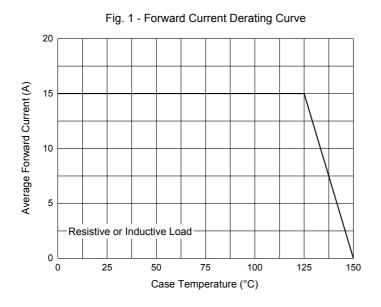


Fig. 3 - Typical Instantaneous Forward Characteristics

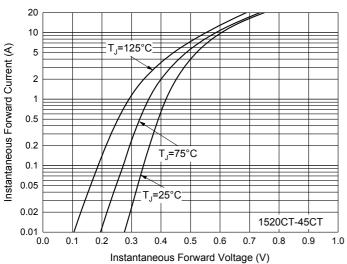


Fig. 2 - Typical Reverse Leakage Characteristics

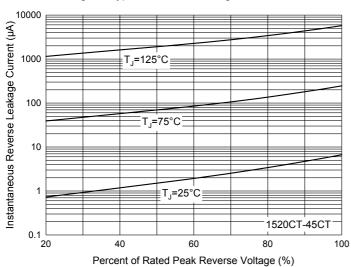


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge
Current

175
150
100
90
100
75
25
8.3 ms Single Half Sine-Wave

0

Fig. I - Typical Instantaneous Forward Characteristics

Number of Cycles at 60 Hz

100

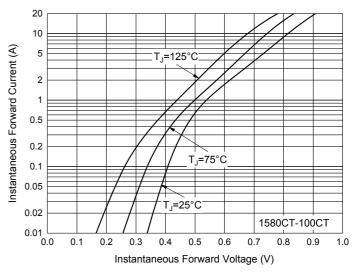
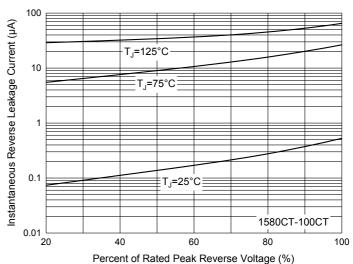


Fig. 2 - Typical Reverse Leakage Characteristics





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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