



Micro Commercial Components



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MBR1520CT THRU MBR15100CT

15 Amp Schottky Barrier Rectifier 20 to 100 Volts

Features

- Meatl of Silicon Rectifier, Majority Conduction
- Guard ring for transient protection
- Low Forward Voltage Drop
- High Current Capability, High Efficiency
- Marking : type number
- 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
- Moisture Sensitivity Level 1

Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +175°C
- Mounting Torque: 5 in-lbs Maximum

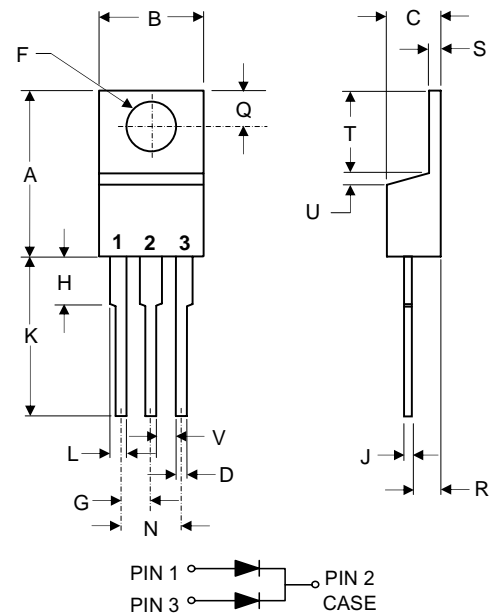
MCC Catalog Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR1520CT	20V	14V	20V
MBR1530CT	30V	21V	30V
MBR1535CT	35V	24.5V	35V
MBR1540CT	40V	28V	40V
MBR1545CT	45V	31.5V	45V
MBR1560CT	60V	42V	60V
MBR1580CT	80V	56V	80V
MBR15100CT	100V	70V	100V

Electrical Characteristics @25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	15 A	$T_C = 125^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	150A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F		
1520CT-45CT		.84V	$I_{FM} = 15A;$
1560CT		.90V	$T_J = 25^\circ\text{C}$
1580CT-100CT		.95V	$I_{FM} = 16A$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R		
1520CT-45CT		0.1mA	$T_J = 25^\circ\text{C}$
1560CT-100CT		1.0mA	
1520CT-45CT		15mA	$T_J = 125^\circ\text{C}$
1560CT		50mA	
1580CT-100CT		100mA	

Notes:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7.

TO-220AB

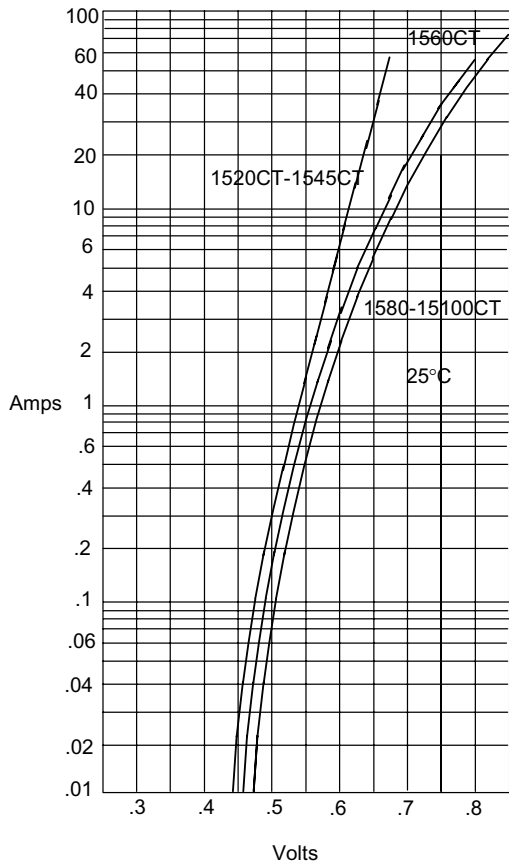


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.560	.625	14.22	15.88	
B	.380	.420	9.65	10.67	
C	.140	.190	3.56	4.82	
D	.020	.045	0.51	1.14	
F	.139	.161	3.53	4.09	Ø
G	.190	.110	2.29	2.79	
H	---	.250	---	6.35	
J	.012	.025	0.30	0.64	
K	.500	.580	12.70	14.73	
L	.045	.060	1.14	1.52	
N	.190	.210	4.83	5.33	
Q	.100	.135	2.54	3.43	
R	.080	.115	2.04	2.92	
S	.045	.055	1.14	1.39	
T	.230	.270	5.84	6.86	
U	-----	.050	-----	1.27	
V	.045	-----	1.15	-----	

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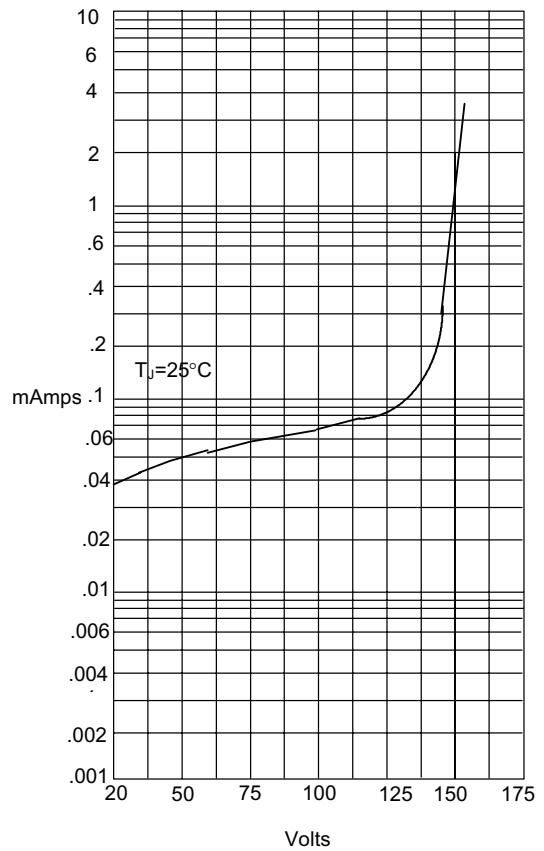
MBR1520CT thru MBR15100CT

Figure 1
Typical Forward Characteristics



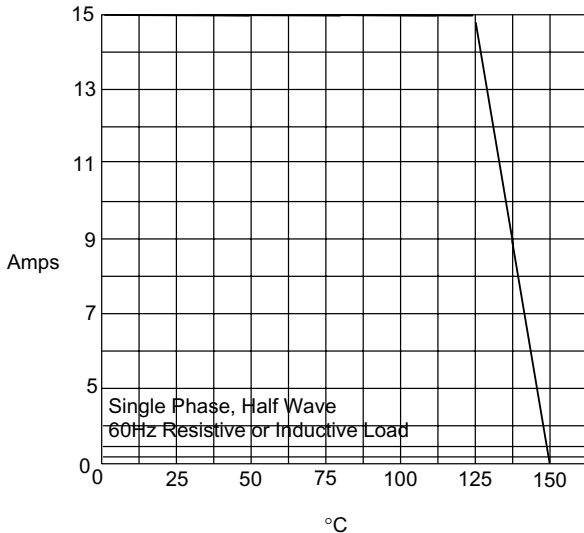
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



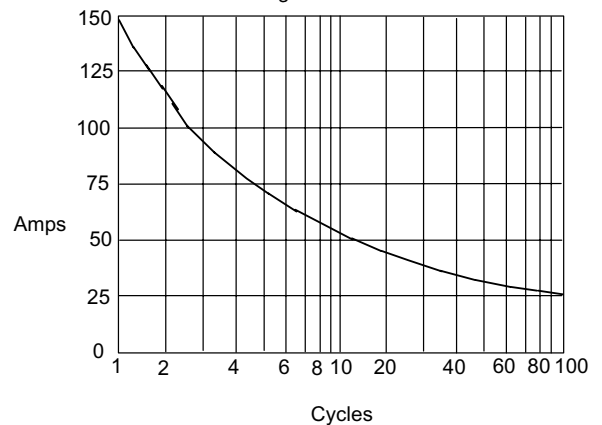
Instantaneous Reverse Leakage Current - MicroAmperes *versus*
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus*
Ambient Temperature - °C

Figure 4
Peak Forward Surge Current



Peak Forward Surge Current - Amperes *versus*
Number Of Cycles At 60Hz - Cycles



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Ordering Information

Device	Packing
(Part Number)-BP	Bulk;1Kpcs/Box

Note : Adding "-HF" suffix for halogen free, eg. Part Number-BP-HF

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