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 Conducton
- Guard ring for transient protection
- Low Forward Voltage Drop
- High Current Capability, High Efficiency
- Low Power Loss

Maximum Ratings

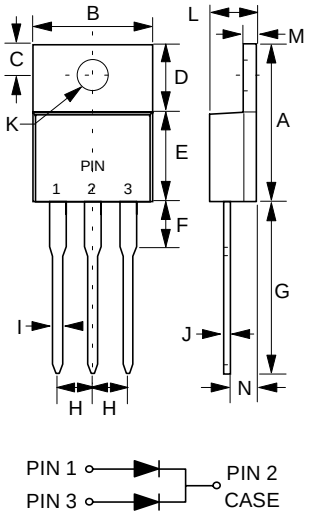
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +175°C

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

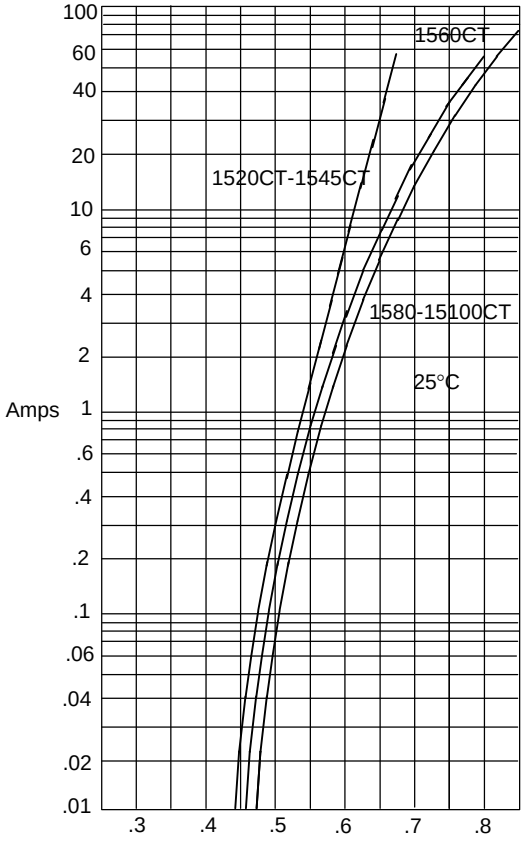
TO-220AB



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.560	.625	14.22	15.88	
B	.380	.420	9.65	10.67	
C	.100	.135	2.54	3.43	
D	.230	.270	5.84	6.86	
E	.380	.420	9.65	10.67	
F	------	.250	------	6.35	
G	.500	.580	12.70	14.73	
H	.090	.110	2.29	2.79	
I	.020	.045	0.51	1.14	
J	.012	.025	0.30	0.64	
K	.139	.161	3.53	4.09	∅
L	.140	.190	3.56	4.83	
M	.045	.055	1.14	1.40	
N	.080	.115	2.03	2.92	

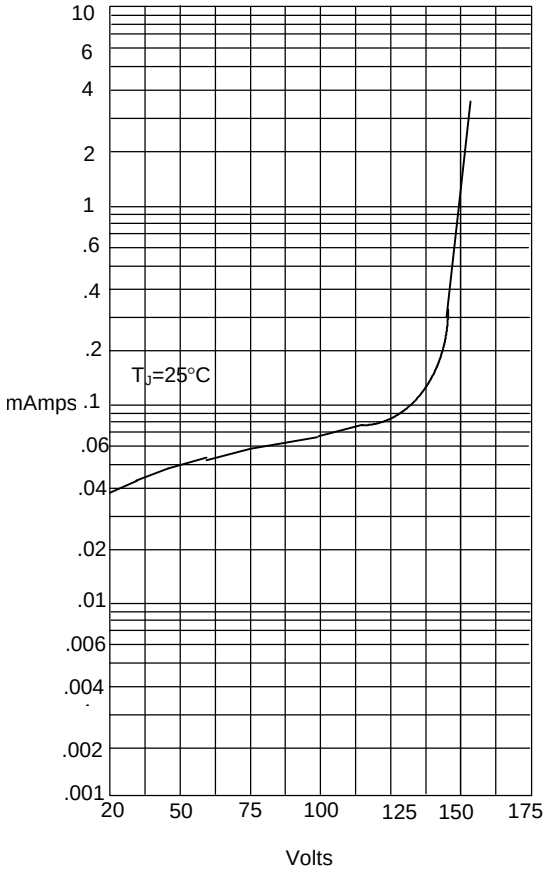
MBR1520CT thru MBR15100CT

Figure 1
Typical Forward Characteristics



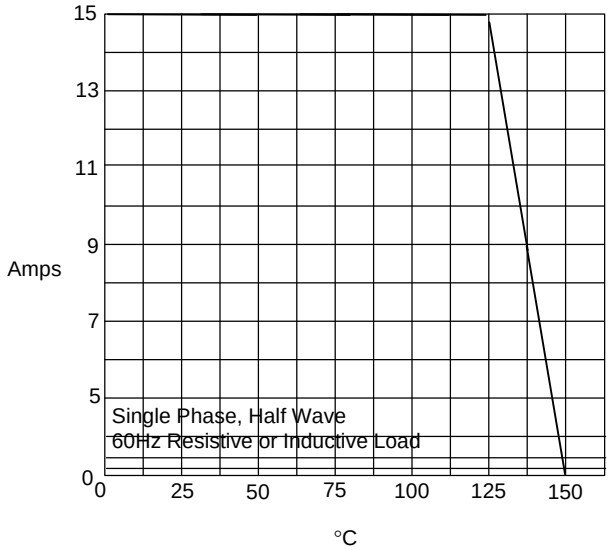
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



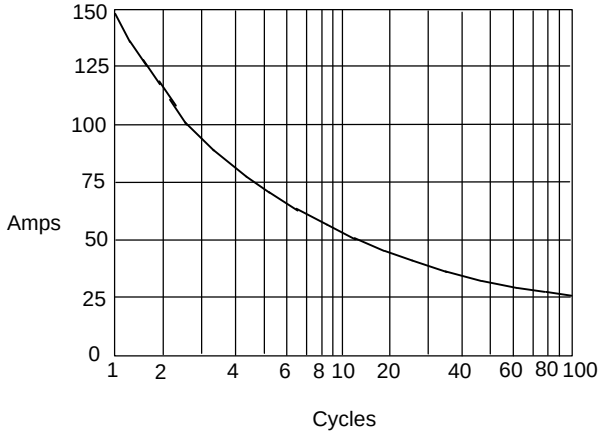
Instantaneous Reverse Leakage Current - MicroAmperes *versus*
Percent Of Rated Peak Reverse Voltage - Volts

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