Micro Commercial Components
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MBR1520 THRU MBR15100

15 Amp Schottky Barrier Rectifier 20 to 100 Volts

Features

- Metal of siliconrectifier, majonty carrier conducton
- Guard ring for transient protection
- Low power loss high efficiency
- High surge capacity, High current capability

Maximum Ratings

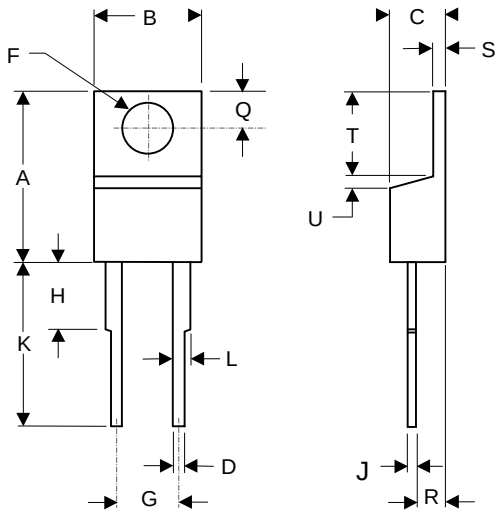
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

Microsemi Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR1520	MBR1520	20V	14V	20V
MBR1530	MBR1530	30V	21V	30V
MBR1535	MBR1535	35V	24.5V	35V
MBR1540	MBR1540	40V	28V	40V
MBR1545	MBR1545	45V	31.5	45V
MBR1560	MBR1560	60V	42V	60V
MBR1580	MBR1580	80V	56V	80V
MBR15100	MBR15100	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 Forward Voltage Drop Per Element MBR1520-1545 MBR1560 MBR1580-1500	V_F	.63V .75V .84V	I_{FM} = 16A mper I_{FM} = 15 Amper T_A = 25°C*
Maximum DC Reverse Current At Rated DC Blocking Voltage	IR	0.2 mA	T_J = 25°C

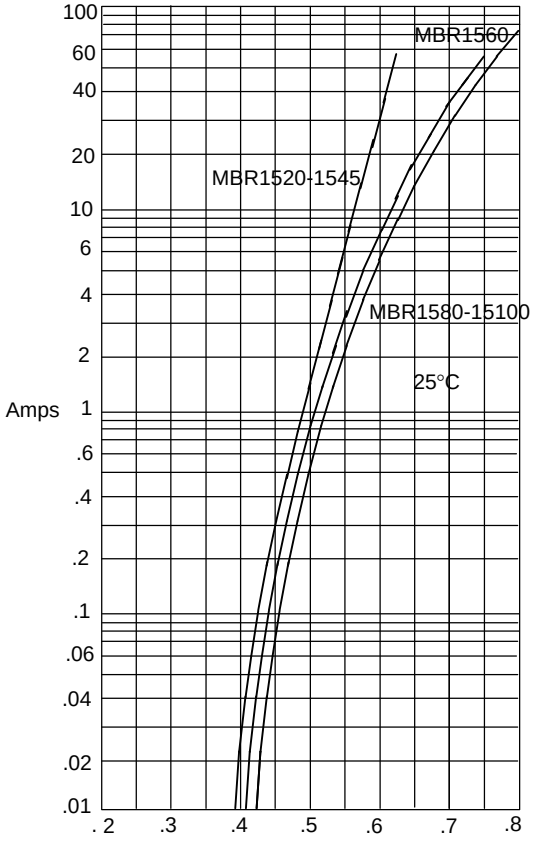
TO-220AC



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.595	.620	15.11	15.75	
B	.380	.405	9.65	10.29	
C	.160	.190	4.06	4.82	
D	.025	.035	0.64	0.89	
F	.142	.147	3.61	3.73	
G	.190	.210	4.83	5.33	
H	.110	.130	2.79	3.30	
J	.018	.025	0.46	0.64	
K	.500	.562	12.70	14.27	
L	.045	.060	1.14	1.52	
Q	.100	.120	2.54	3.04	
R	.080	.110	2.04	2.79	
S	.045	.055	1.14	1.39	
T	.235	.255	5.97	6.48	
U	------	.050	-----	1.27	

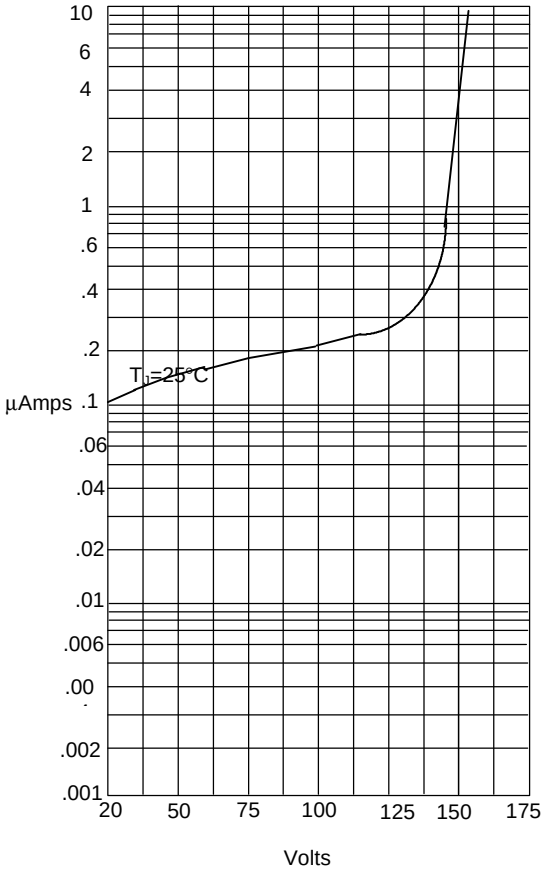
MBR1520 thru MBR15100

Figure 1
Typical Forward Characteristics



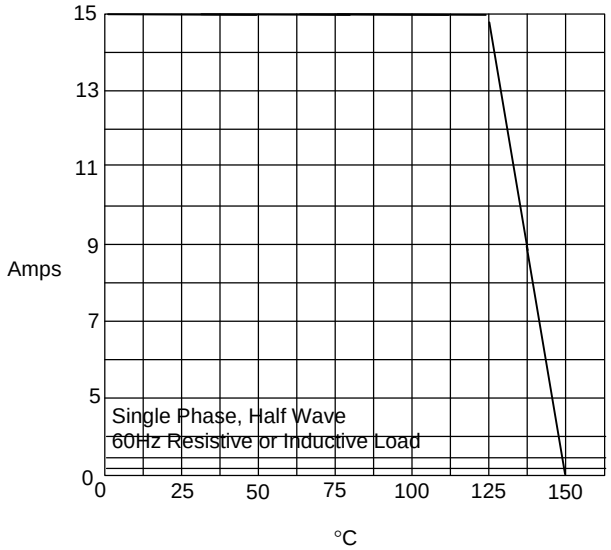
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



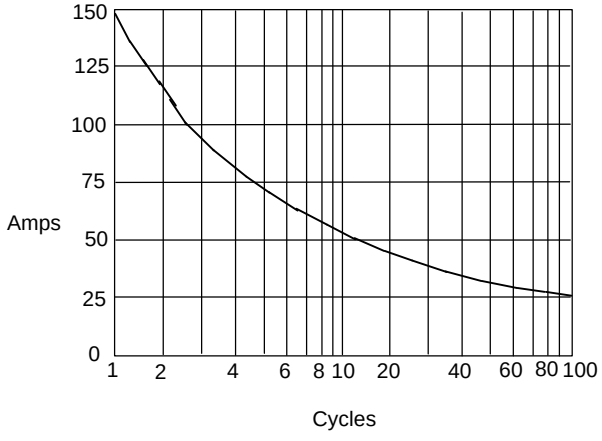
Instantaneous Reverse Leakage Current - MicroAmperes *versus*
Percent Of Rated Peak Reverse Voltage - Volts

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