

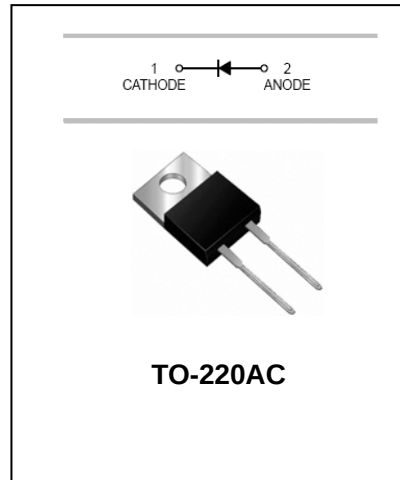


Schottky Barrier Rectifier

MBR1520-MBR15100

FEATURES

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



MAXIMUM RATING operating temperature range applies unless otherwise specified

Sym bol	Parameter	MBR 1520	MBR 1530	MBR 1535	MBR 1540	MBR 1545	MBR 1560	MBR 1580	MBR 15100	Un it
V_{RRM}	Recurrent Peak Reverse Voltage	20	30	35	40	45	60	80	100	V
V_{RMS}	RMS Reverse Voltage	14	21	24.5	28	31.5	42	56	70	V
V_{DC}	DC Blocking Voltage	20	30	35	40	45	60	80	100	V
$I_{F(AV)}$	Average Forward Total Device Rectified Current	15								A
I_{FSM}	Forward Surge Current 8.3ms Single Half Sine-wave Superimosed on Rated Load	150								A
T_j	Operating Junction Temperature Range	-55 to +150								°C
T_{stg}	Storage Temperature Range	-55 to +150								°C

Note:1.Mounted on Heatsink Size of 2 in*3un*0.25in Al-Plate.



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ELECTRICAL CHARACTERISTICS @ $T_A=25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Test conditions	MBR1520- MBR1545	MBR1560	MBR1580- MBR15100	UNIT
			MAX			
Reverse Current	I _R	V _R =V _{RRM} , T _A =25°C V _R =V _{RRM} , T _A =125°C	0.2			mA
Forward Voltage	V _F (Note1)	I _F =15A	0.75		0.84	V

Note:1.Pulse test:300 μs pulse width,1% duty cycle.

TYPICAL CHARACTERISTICS @ $T_A=25^\circ\text{C}$ unless otherwise specified

Figure 1
Typical Forward Characteristics

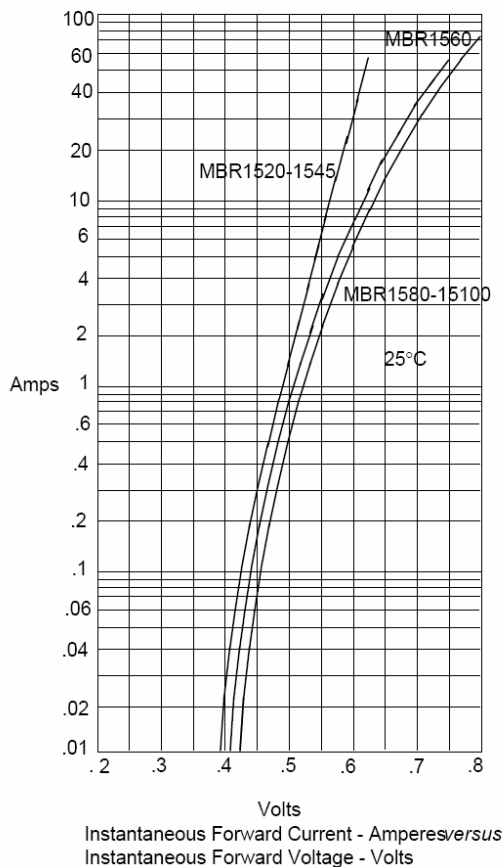
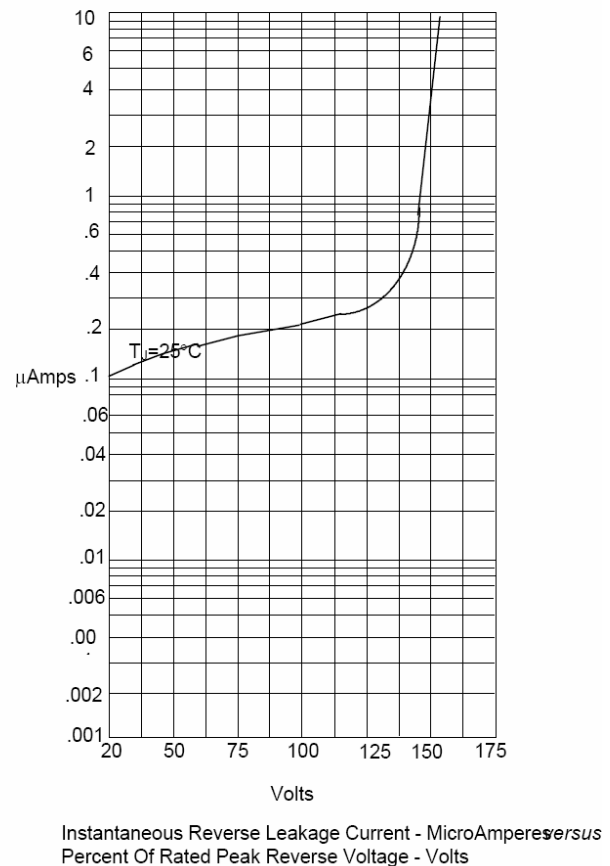


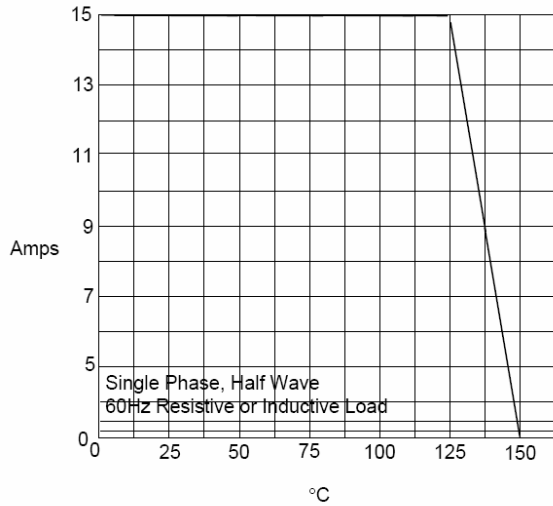
Figure 2
Typical Reverse Characteristics



Schottky Barrier Rectifier

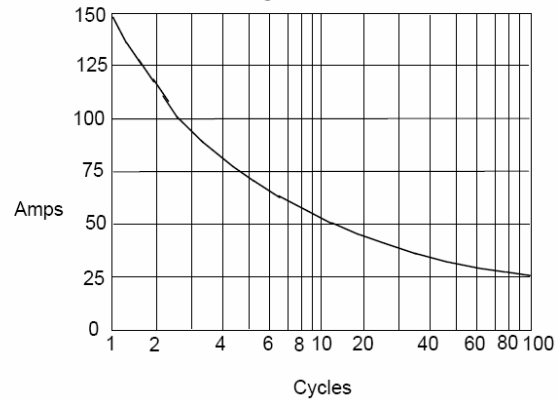
MBR1520-MBR15100

Figure 3
Forward Derating Curve



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

Figure 4
Peak Forward Surge Current

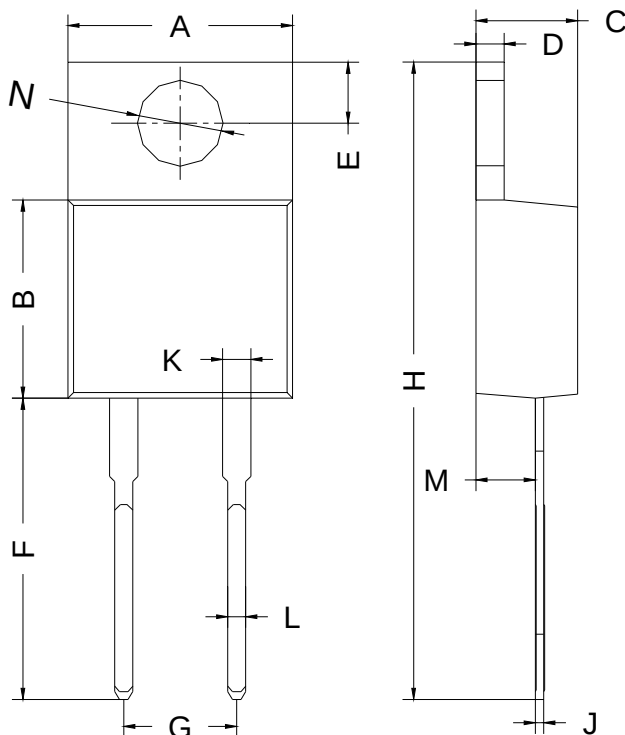


Peak Forward Surge Current - Amperes versus
Number Of Cycles At 60Hz - Cycles

PACKAGE OUTLINE

Plastic surface mounted package

TO-220AC



TO-220AC		
Dim	Min	Max
A	9.80	10.30
B	8.70	9.10
C	4.57 Typical	
D	1.27 Typical	
E	2.64	2.84
F	13.14	13.74
G	4.98	5.18
H	28.03	28.83
J	0.38 Typical	
K	1.22	1.32
L	0.71	0.91
M	2.50 Typical	
N	3.86 Typical	
All Dimensions in mm		