



MBR1030F THRU MBR10200F SCHOTTKY BARRIER RECTIFIERS

Reverse Voltage - 30 to 200 Volts Forward Current - 10.0 Amperes

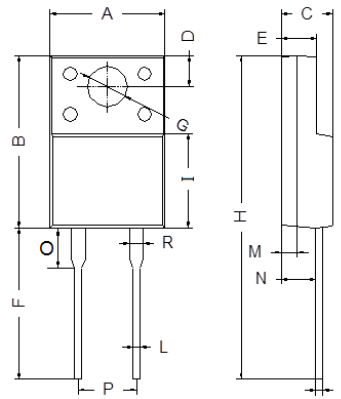
FEATURES

High surge capacity
For use in low voltage ,high frequency
Inverters,free wheeling,and polarity protection
applications.
Metal silicon junction,majority carrier conduction.
High current capacity,low forward voltage drop.
Guard ring die construction for transient protection.

MECHANICAL DATA

Case: TO-220F-2L
Molding Compound: UL Flammability Classification
Rating 94V-0
Terminals: Matte tin-plated leads; solderability-per
MIL-STD-202, Method 208

TO-220F-2L



TO-220F-2L		
Dim	Min	Max
A	9.80	10.30
B	15.20	15.80
C	4.37	4.77
D	2.90	3.30
E	2.50	2.90
F	12.90	13.50
G	3.10	3.30
H	28.40	29.16
I	8.40	9.10
J	0.35	0.58
L	0.68	0.94
M	1.30	1.50
N	2.40	2.60
O	2.60	3.10
P	4.98	5.18
R	1.10	1.32

All Dimensions in mm



1 CATHODE 2 ANODE

MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	MBR 1030F	MBR 1035F	MBR 1040F	MBR 1045F	MBR 1050F	MBR 1060F	MBR 1080F	MBR 10100F	MBR 10150F	MBR 10200F	UNIT	
V_{RRM}	Recurrent Peak Reverse Voltage	30	35	40	45	50	60	80	100	150	200	V	
V_{RMS}	RMS Reverse Voltage	21	25	28	32	35	42	56	70	105	140	V	
V_{DC}	DC Blocking Voltage	30	35	40	45	50	60	80	100	150	200	V	
$I_{F(AV)}$	Average Forward Total Device Rectified Current @ $T_A=100^{\circ}C$	10										A	
I_R	Reverse Current $V_R=V_{RRM}, T_A=25^{\circ}C$ $V_R=V_{RRM}, T_A=125^{\circ}C$	0.1					50					mA	
		15					25						
I_{FSM}	Forward Surge Current 8.3ms Single Half Sine-wave Superimosed on Rated Load	150										A	
V_F (Note1)	Forward $I_F=10A$	0.70			0.80		0.85		0.90		0.95		V
$R_{\theta JC}$	Thermal Resistance(Note1)	4.0										$^{\circ}C/W$	
T_J, T_{STG}	Operating and Storage Temperature Range	-55 to +150										$^{\circ}C$	

Note:1.Thermal resistance from junction to case.



TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified.

FIG.1- FORWARD CURRENT DERATING CURVE

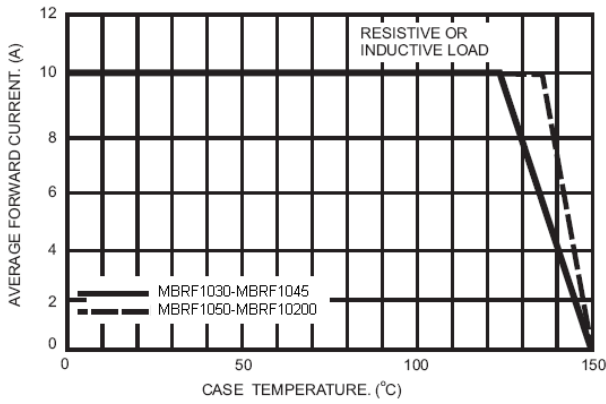


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

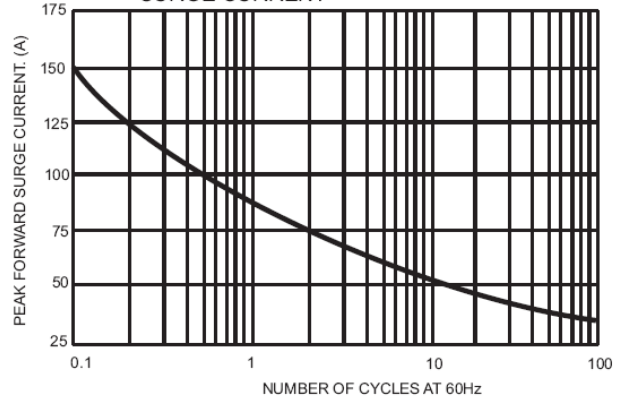


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

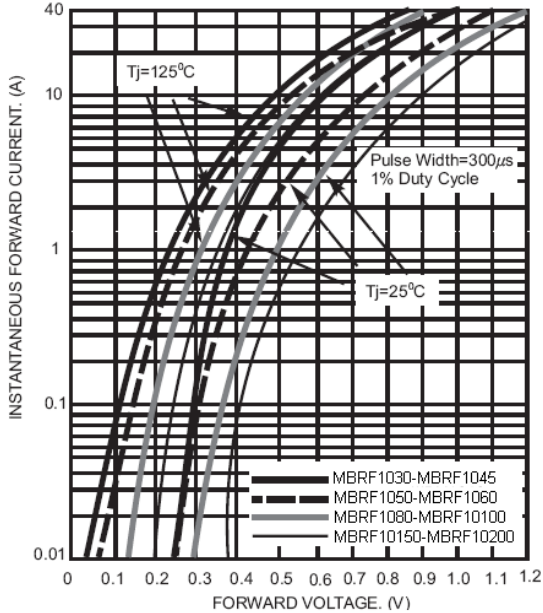


FIG.4- TYPICAL REVERSE CHARACTERISTICS

