



MBR830F THRU MBR8200F

SCHOTTKY BARRIER RECTIFIERS

Reverse Voltage - 30 to 200 Volts Forward Current - 8.0 Amperes

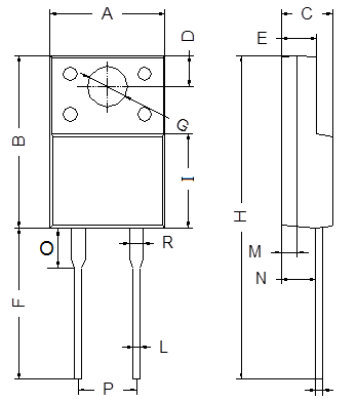
FEATURES

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

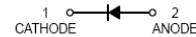
Case: TO-220F-2L
 Molding Compound: UL Flammability Classification
 Rating 94V-0
 Terminals: Matte tin-plated leads; solderability-per
 MIL-STD-202, Method 208

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



MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	MBR 830F	MBR 835F	MBR 840F	MBR 845F	MBR 850F	MBR 860F	MBR 880F	MBR 8100F	MBR 8150F	MBR 8200F	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 @ $T_A=100^{\circ}C$	8.0										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					15		25		50		mA
I_{FSM}	Forward Surge Current 8.3ms Single Half Sine-wave Superimosed on Rated Load	150										A	
V_F (Note1)	Forward $I_F=8A$	0.70			0.80		0.85		0.90		0.95		V
$R_{\theta JC}$	Thermal Resistance(Note1)	3.0										$^{\circ}C/W$	
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 – PEAK FORWARD SURGE CURRENT

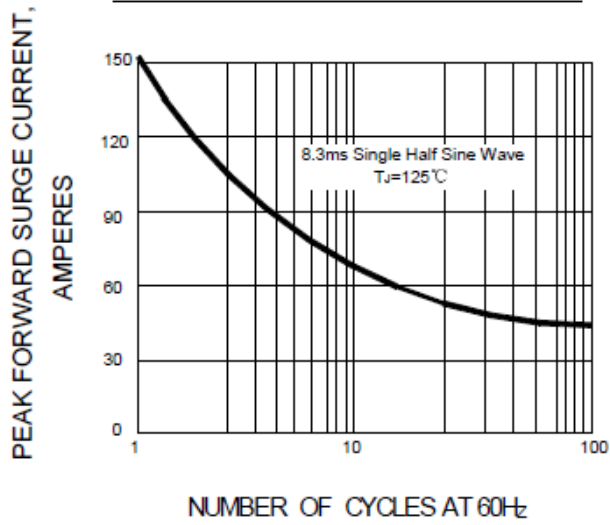


FIG.2 – FORWARD DERATING CURVE

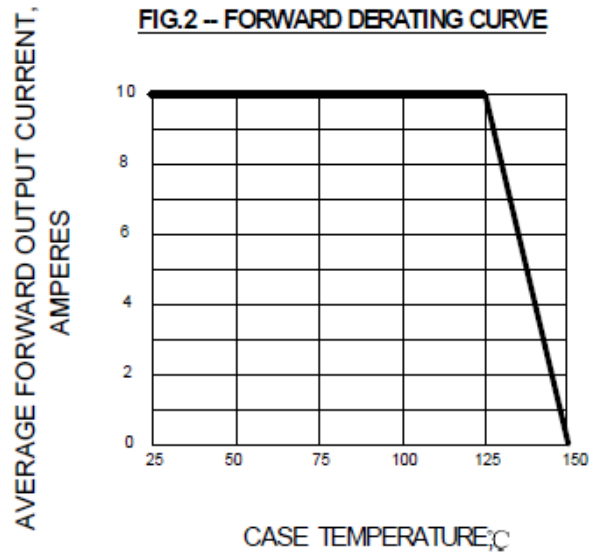


FIG.3 – TYPICAL FORWARD CHARACTERISTIC

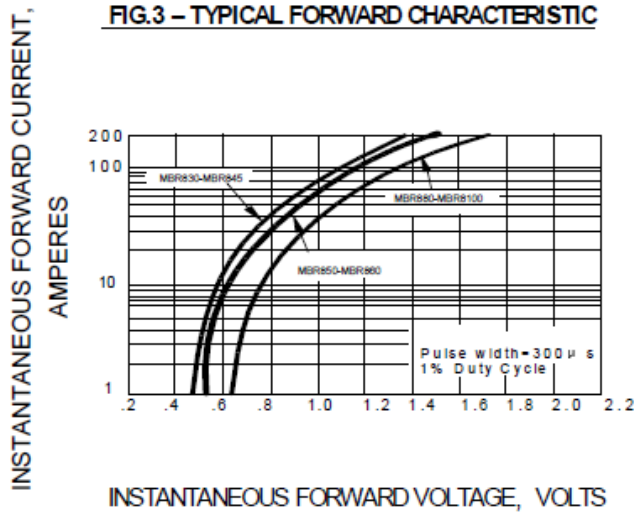


FIG.4 – TYPICAL REVERSE CHARACTERISTIC

