



MBR1030 THRU MBR10200

SCHOTTKY BARRIER RECTIFIERS

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

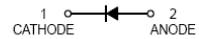
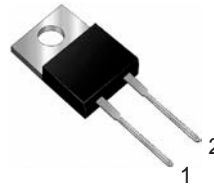
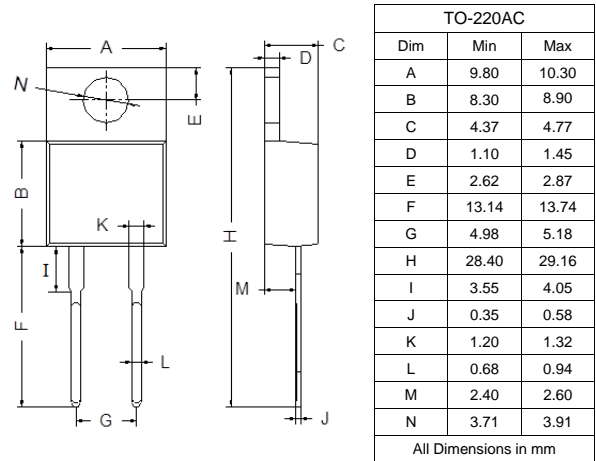
FEATURES

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

TO-220AC



MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	MBR 1030	MBR 1035	MBR 1040	MBR 1045	MBR 1050	MBR 1060	MBR 1080	MBR 10100	MBR 10150	MBR 10200	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)	2.0										$^{\circ}C/W$	
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

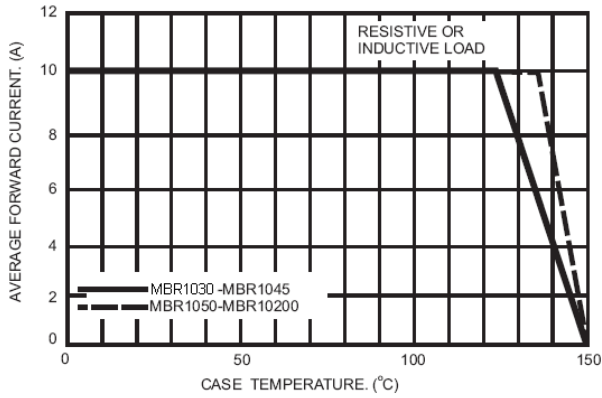


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

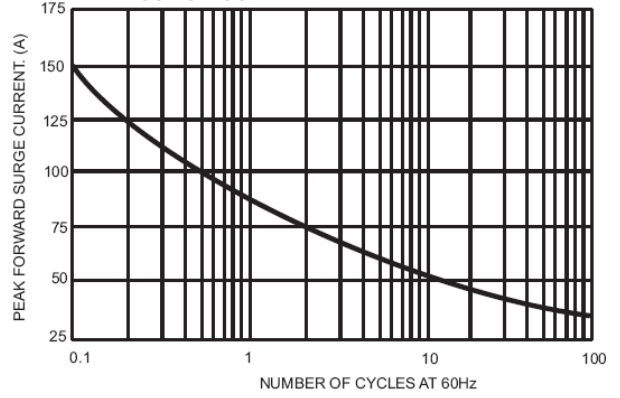


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

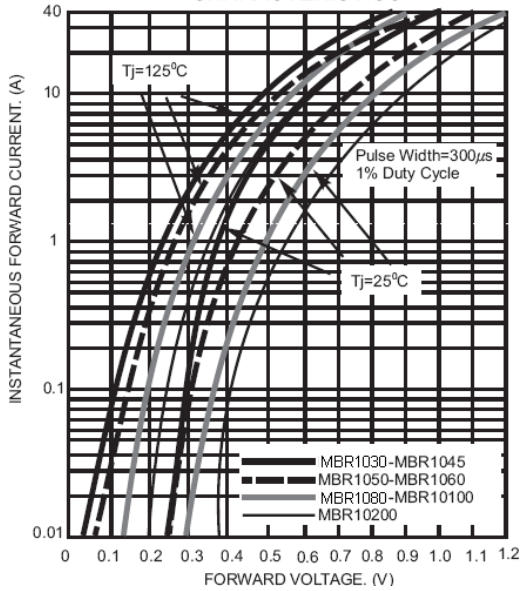


FIG.4- TYPICAL REVERSE CHARACTERISTICS

