

MBR220-MBR2100

AXIAL LEADED SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE: 20 - 100V CURRENT: 2.0 A

Features

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- High Current Capability
- Low Power Loss, High Efficiency
- High Surge Current Capability
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications



Case: DO-15, Molded Plastic

Terminals: Plated Leads Solderable per

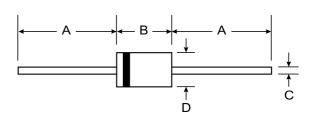
MIL-STD-202, Method 208 Polarity: Cathode Band

• Weight: 0.40 grams (approx.)

Mounting Position: AnyMarking: Type Number







DO-15						
Dim	Min	Max				
Α	25.40	_				
В	5.50	7.62				
С	0.686	0.889				
D	2.60	3.60				
All Dimensions in mm						

Maximum Ratings and Electrical Characteristics @TA=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	MBR220	MBR230	MBR240	MBR250	MBR260	MBR280	MBR2100	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	20	30	40	50	60	80	100	V
RMS Reverse Voltage	VR(RMS)	14	21	28	35	42	56	70	V
Average Rectified Output Current @T _L = 100°C (Note 1)	lo	2.0							Α
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	50						А	
Forward Voltage @I _F = 2.0A	VFM	0.50			0.70 0.88		<u>, </u>	V	
	lгм	0.5 10							mA
Typical Junction Capacitance (Note 2)	Cj	170 140				pF			
Typical Thermal Resistance (Note 1)	R _θ JA	35					°C/W		
Operating and Storage Temperature Range	Tj, Tstg	-65 to +150						°C	

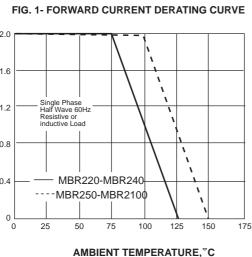
Note: 1. Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from the case.

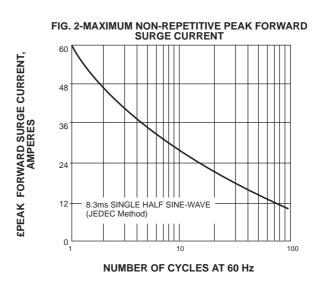
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



RATINGS AND CHARACTERISTIC CURVES MBR220THRU MBR2100

AVERAGE FORWARD RECTIFIED CURRENT, AMPERES 2.0 1.6 Single Phase Half Wave 60Hz Resistive or inductive Load 1.2 0.8 0.4 0 0 25







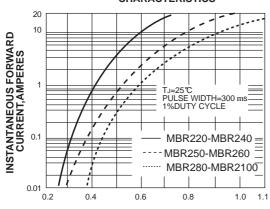
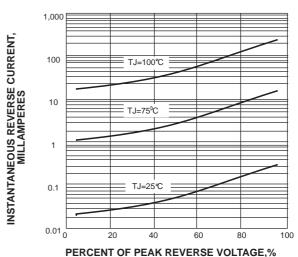


FIG. 4-TYPICAL REVERSE CHARACTERISTICS



INSTANTANEOUS FORWARD VOLEAGE, **VOLTS**

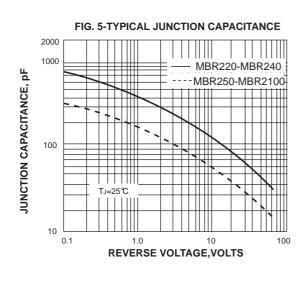
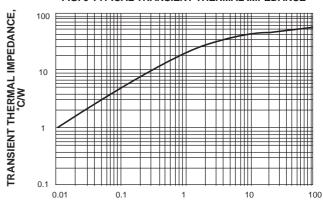


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



t,PULSE DURATION,sec.