

## 8.0A HIGH VOLTAGE SCHOTTKY BARRIER RECTIFIER

### **Features**

- Power Schottky Barrier Chip
- Guard Ring for Transient Protection
- Low Forward Voltage Drop
- Low Power Loss, High Efficiency
- High Surge Current Capability
- Epoxy Meets UL 94V-0 Classification
- Ideally Suited for Use in High Frequency SMPS, Inverters and As Free Wheeling Diodes

# **Mechanical Data**

Case: TO-220A, Molded Plastic

• Terminals: Plated Leads Solderable per

MIL-STD-202, Method 208

Polarity: See Diagram

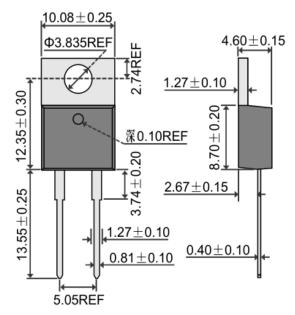
Weight: 1.9 grams (approx.)

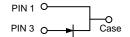
Mounting Position: Any

Mounting Torque: 0.6 N.m Max.

Lead Free: For RoHS / Lead Free Version

# TO-220AC





# 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	MBR8150	MBR8200	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	150	200	V
RMS Reverse Voltage	VR(RMS)	105	140	٧
Average Rectified Output Current @T <sub>C</sub> = 100°C	lo	8.0		Α
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	IFSM	150		А
Forward Voltage @I <sub>F</sub> = 8.0A	VFM	0	.9	V
Peak Reverse Current $@T_J = 25^{\circ}C$ At Rated DC Blocking Voltage $@T_J = 100^{\circ}C$	IRM	-	2 0	mA
Typical Junction Capacitance (Note 1)	Cı	200		pF
Thermal Resistance Junction to Ambient Thermal Resistance Junction to Case	R JA R JC	73 3.0		°C/W
Operating and Storage Temperature Range	TJ, TSTG	-55 to +150		°C

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



1.0

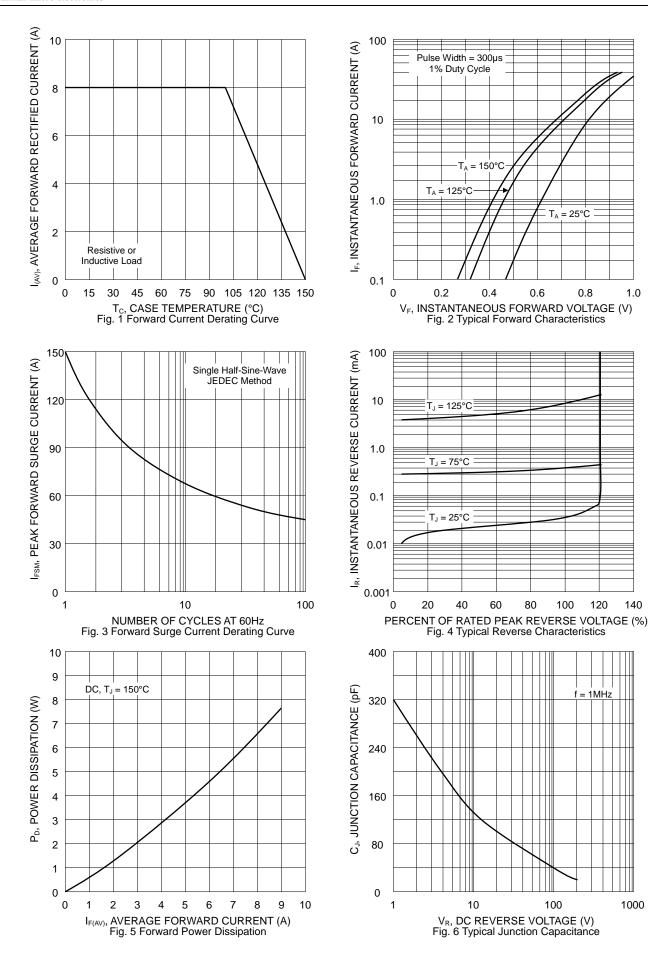
140

120

= 1MHz

8.0

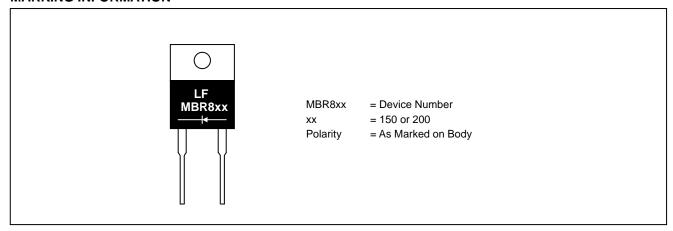




1000



# **MARKING INFORMATION**



# **PACKAGING INFORMATION**

#### **BULK**

Tube Size L x W x H (mm)	Quantity (PCS)	Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
525 x 31 x 6	50	558 x 150 x 40	1,000	570 x 235 x 170	5,000	11.85

### RECOMMENDED SCREW MOUNTING ARRANGEMENT

Recommended isolated mounting when screw is at heatsink potential. 4-40 hardware is used.

Screw should not be tightened with any type of air-forced torque or equipment that may cause high impact on device package. The insulating bushing inside the mounting hole will insure the screw threads do not contact the metal base.

The interface should apply a layer of thermal grease or a highly conductive thermal pad for better heat dissipation.

