

# MBR10200

**PRV : 200 Volts**  
**Io : 10 Amperes**

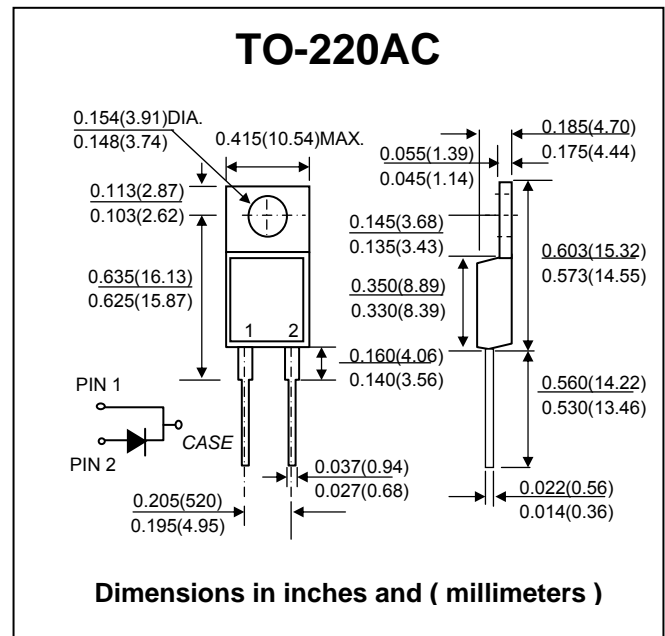
## FEATURES :

- \* Plastic package has Underwriters Laboratory Flammability Classifications 94V-0
- \* Metal silicon junction, majority carrier conduction
- \* Low power loss, high efficiency
- \* Guardring for overvoltage protection
- \* For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- \* **Pb / RoHS Free**

## MECHANICAL DATA :

- \* Case : JEDEC TO-220AC molded plastic body
- \* Terminals: Plated leads, solderable per MIL-STD-750 Method 2026
- \* Polarity: As marked
- \* Mounting Position: Any
- \* Weight : 2.24 grams (Approximately)

# SCHOTTKY BARRIER RECTIFIER DIODE

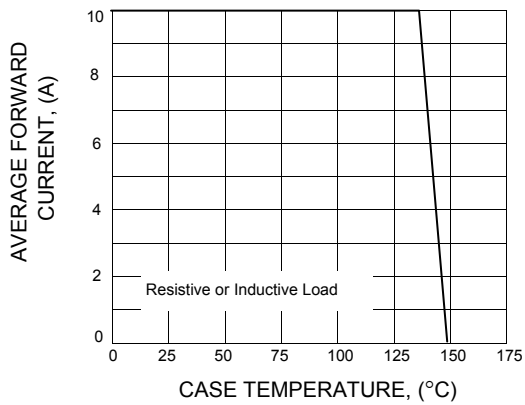
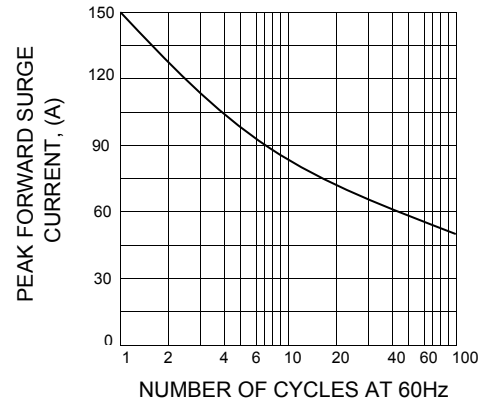
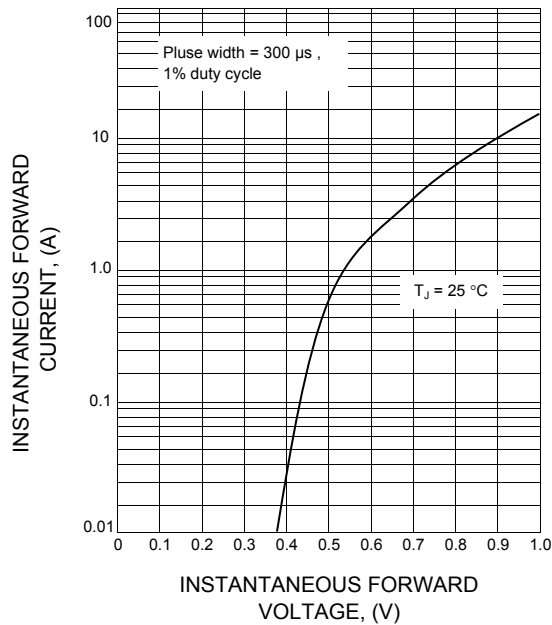


## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ( Ta = 25 °C unless otherwise noted)

RATINGS	SYMBOL	VALUE	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	200	V
Maximum RMS Voltage	$V_{RMS}$	140	V
Maximum DC Blocking Voltage	$V_{DC}$	200	V
Maximum Average Forward Rectified Current at $T_C = 135\text{ }^\circ\text{C}$	$I_{F(AV)}$	10	A
Peak Forward Surg Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	150	A
Maximum Instantaneous Forward Voltage (Note 1) at $I_F = 10\text{ A}$ , $T_C = 25\text{ }^\circ\text{C}$	$V_F$	1.05	V
Maximum Average Reverse Current at $T_C = 25\text{ }^\circ\text{C}$	$I_R$	0.1	mA
Rate Peak Reverse Voltage (Note 1) $T_C = 100\text{ }^\circ\text{C}$		10	
Typical Thermal Resistance (Junction to Case)	$R_{\theta JC}$	2.0	$^\circ\text{C/W}$
Operating Junction Temperature Range	$T_J$	-65 to + 150	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-65 to + 175	$^\circ\text{C}$

**Note :** (1) Pulse test : 300  $\mu\text{s}$  pluse width, 1% duty cycle

## RATING AND CHARACTERISTIC CURVES ( MBR10200 )

**FIG.1 - FORWARD CURRENT DERATING CURVE**

**FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**

**FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**

**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**
