

### FEATURES

- \* Ideal for surface mount applications
- \* Easy pick and place
- \* Built-in strain relief
- \* Fast switching speed

### MECHANICAL DATA

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Lead solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: As Marked
- \* Mounting position: Any

### VOLTAGE RANGE

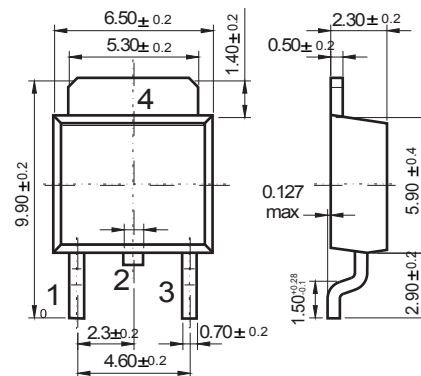
200 Volts

### CURRENT

5.0 Ampere

TO-252

Unit: mm



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25 °C ambient temperature unless otherwise specified.  
Single phase half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

TYPE NUMBER	MBRD5200	UNITS
Maximum Recurrent Peak Reverse Voltage	200	V
Maximum RMS Voltage	140	V
Maximum DC Blocking Voltage	200	V
Maximum Average Forward Rectified Current		
See Fig. 1	5.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	150	A
Maximum Instantaneous Forward Voltage at 5.0A	0.78	V
Maximum DC Reverse Current Ta=25°C	0.02	mA
at Rated DC Blocking Voltage Ta=125°C	2	mA
Typical Junction Capacitance (Note1)	570	pF
Typical Thermal Resistance R JA (Note 2)	60	°C/W
Operating Temperature Range Tj	-55 to +175	°C
Storage Temperature Range Tstg	-55 to +175	°C

Note : 1.FR-4 PCB, 2oz.Copper.  
2.Polyimide PCB, 2oz.Copper.Cathode pad dimensions 18.8mm x 14.4mm.Anode pad dimensions 5.6mm x 14.4mm.

# RATING AND VCHARACTERISTIC CURVES(MBRD5200)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

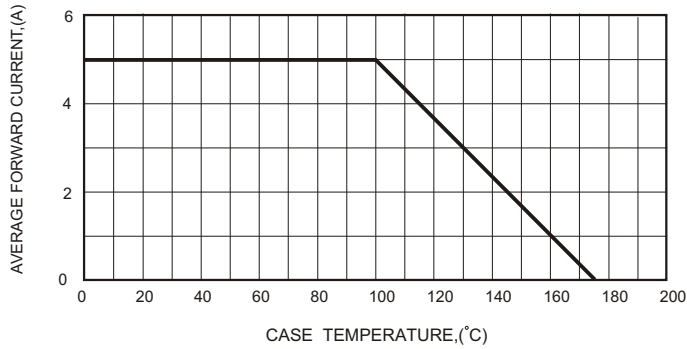


FIG.2-TYPICAL FORWARD CHARACTERISTICS

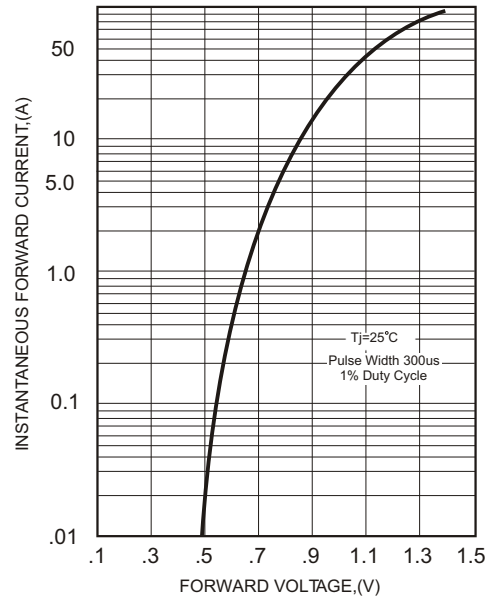


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

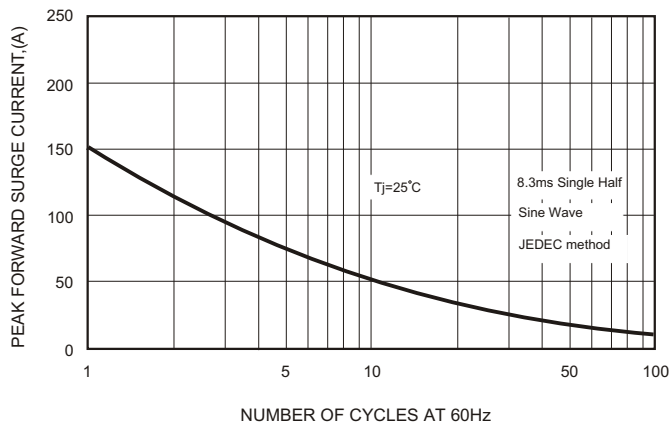


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

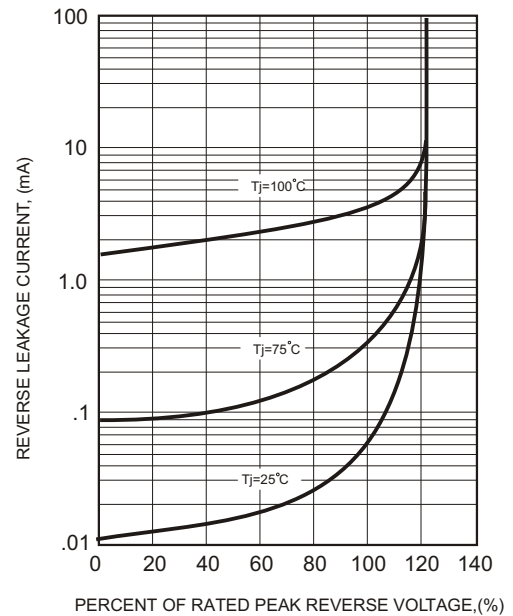


FIG.4-TYPICAL JUNCTION CAPACITANCE

