

Features:

- Metal of silicon rectifier, majority carrier conduction
- Guard ring for transient protection
- Low power loss, high efficiency
- High current capability, low VF
- High surge capacity
- Plastic package has UL flammability classification 94V-0
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

Mechanical Data:

Case	: TO-220AB molded plastic
Polarity	: As marked on the body
Weight	: 0.08 ounces, 2.24 grams
Mounting Position	: Any
Reverse Voltage	: 200 Volts
Forward Current	: 10 Amperes

Maximum Ratings and Electrical Characteristics:

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristics	Symbol	Values	Unit
Max. Recurrent Peak Reverse Voltage	V_{RRM}	200	V
Max. RMS Voltage	V_{RMS}	140	
Max. DC Blocking Voltage	V_{DC}	200	
Max. Average Forward Rectified Current (See Fig.1)	$I_{(AV)}$	10	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I_{FSM}	125	
Max. Forward Voltage at 5A, per leg	V_F	0.09	V
Max. DC Reverse Current at $T_J = 25^{\circ}C$ at Rated DC Blocking Voltage at $T_J = 125^{\circ}C$	I_R	0.05 20	mA
Typical Thermal Resistance (Note 3)	$R_{\theta JC}$	2.0	$^{\circ}C/W$
Operating Temperature Range	T_J	-65 to +175	$^{\circ}C$
Storage Temperature Range	T_{STG}	-65 to +175	$^{\circ}C$

Note:

1. Both Bonding and Chip structure are available.

Ratings and Characteristic Curves

FIG. 1 – FORWARD CURRENT DERATING CURVE

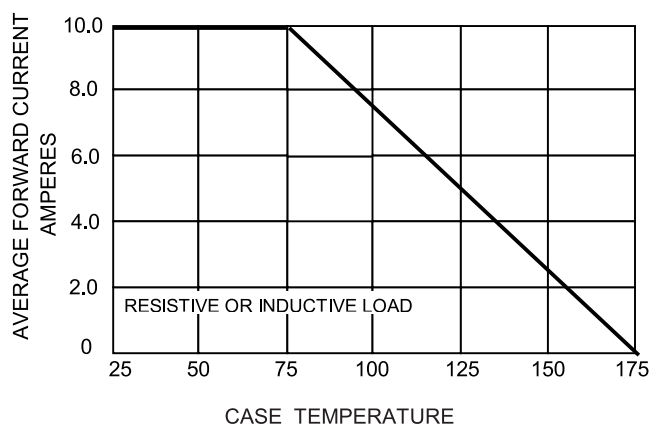


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

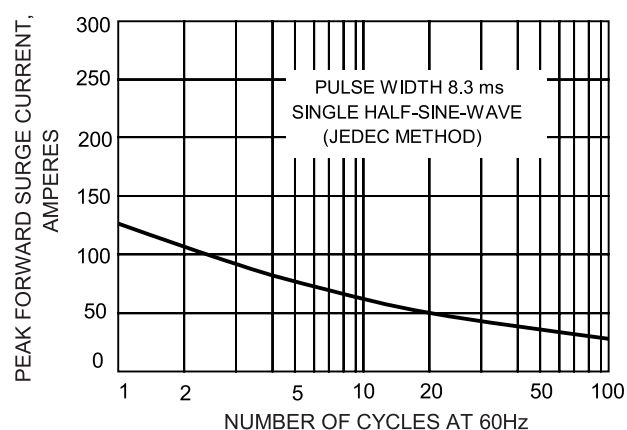


FIG.3-TYPICAL REVER CHARACTERISTICS

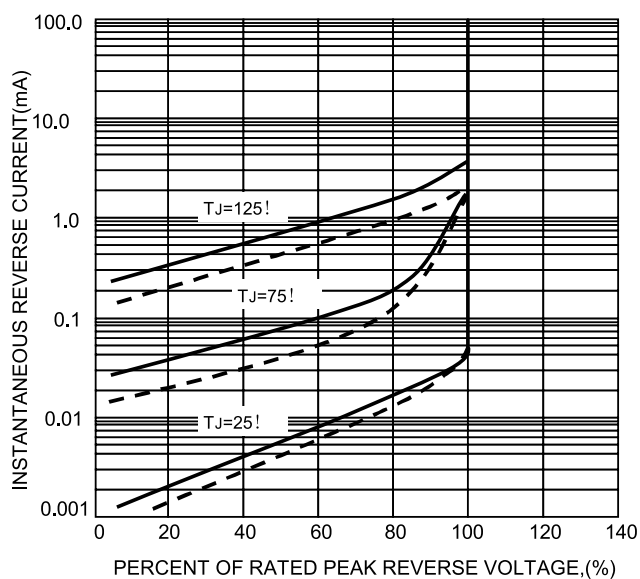
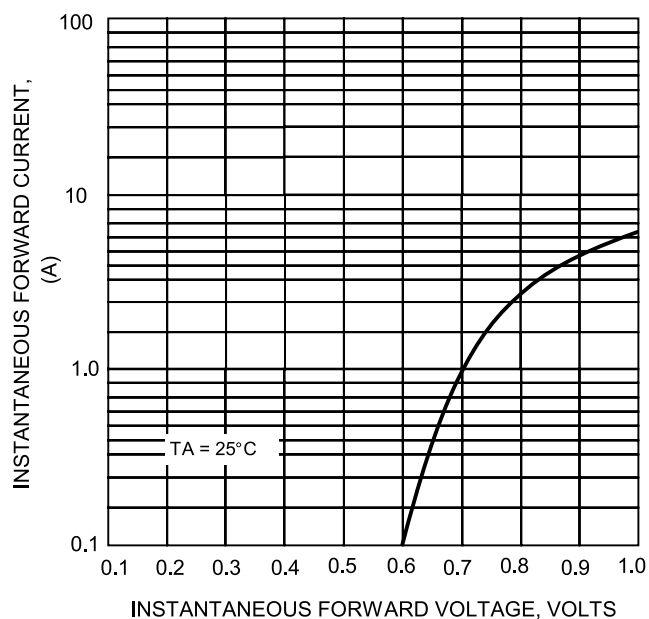
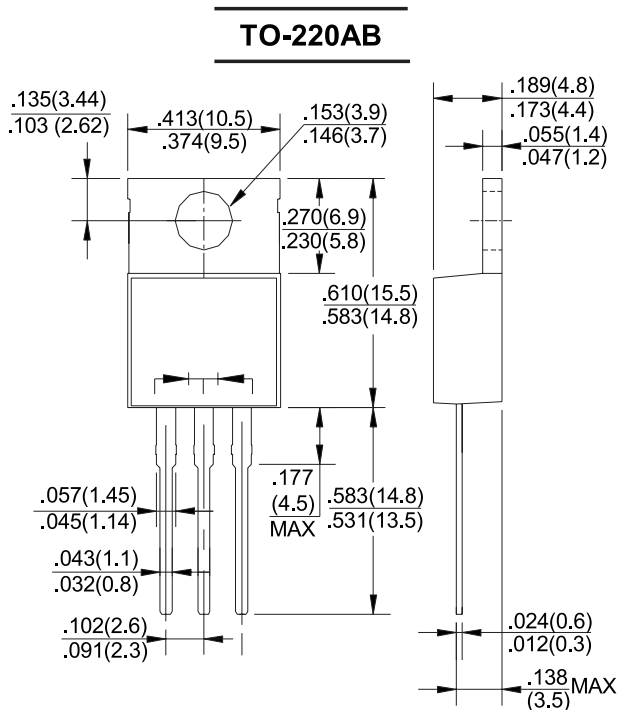


FIG.4-TYPICAL FORWARD CHARACTERISTICS



Dimensions:



Dimensions : Inches (Millimetres)

Part Number Table

Description	Part Number
Schottky Barrier Rectifier	MBR10200CT+

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