

MBR640~MBR6200

SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 40 to 200 Volts **CURRENT** 6.0 Ampers

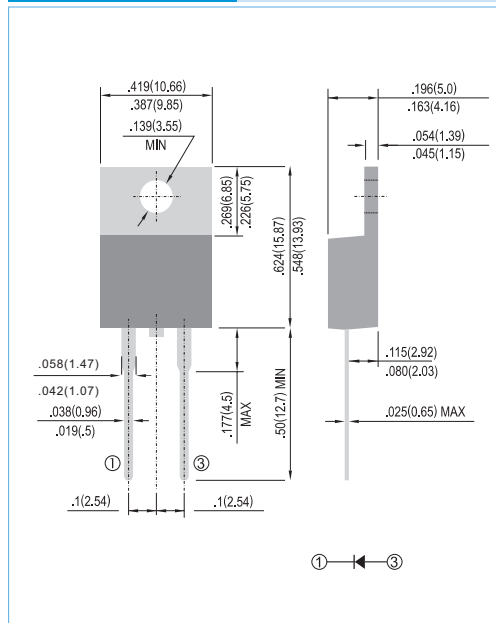
TO-220AC Unit: inch (mm)

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228
- Low power loss, high efficiency.
- Low forward voltage, high current capability
- High surge capacity.
- For use in low voltage,high frequency inverters free wheeling , and polarity protection applications.
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: TO-220AC full molded plastic package
- Terminals: Lead solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Mounting Position: Any
- Weight: 0.0655 ounces, 1.859 grams.



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load.

PARAMETER	SYMBOL	MBR640	MBR645	MBR650	MBR660	MBR680	MBR690	MBR6100	MBR6150	MBR6200	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	40	45	50	60	80	90	100	150	200	V
Maximum RMS Voltage	V _{RMS}	28	31.5	35	42	56	63	70	105	140	V
Maximum DC Blocking Voltage	V _{DC}	40	45	50	60	80	90	100	150	200	V
Maximum Average Forward Current (See Figure 1)	I _{F(AV)}	6.0									A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I _{FSM}	75									A
Maximum Forward Voltage at 6.0A per leg	V _F	0.70		0.75		0.80			0.90		V
Maximum DC Reverse Current T _J =25°C at Rated DC Blocking Voltage T _J =100°C	I _R	0.05 20									mA
Typical Thermal Resistance	R _{θJC}	3									°C / W
Operating Junction and Storage Temperature Range	T _J ,T _{STG}	-55 to +150		-65 to +175							°C

NOTES : Both Bonding and Chip structure are available.

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RATING AND CHARACTERISTIC CURVES

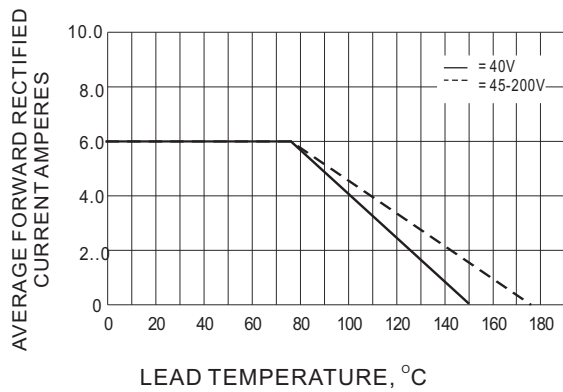


Fig.1- FORWARD CURRENT DERATING CURVE

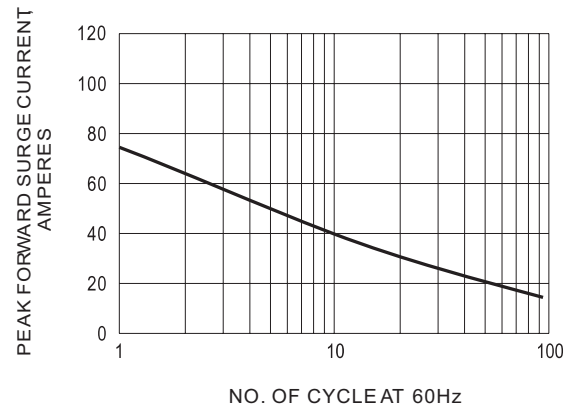


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

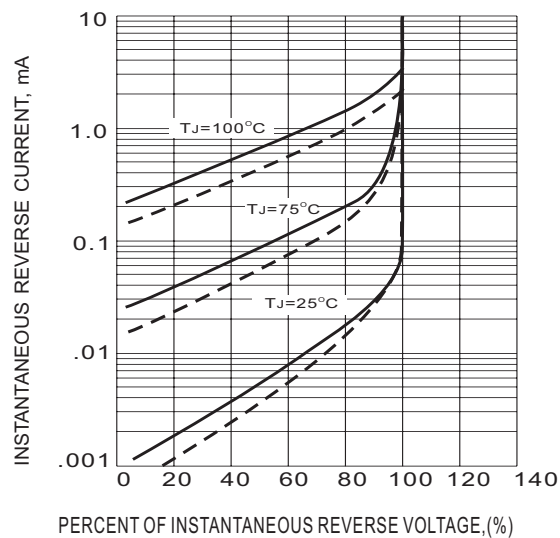


Fig.3- TYPICAL REVERSE CHARACTERISTIC

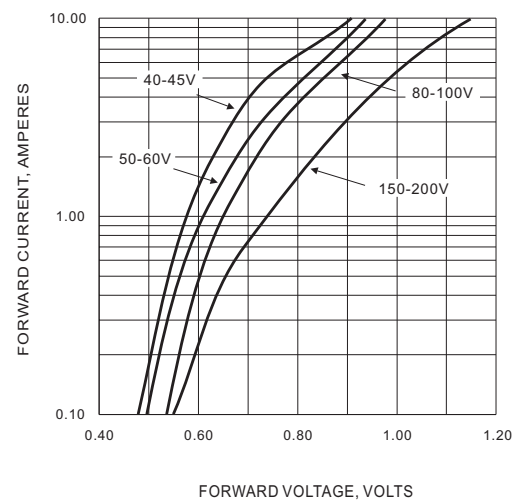


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC