

MBR1040~MBR10200

10 AMPERES SCHOTTKY BARRIER RECTIFIERS

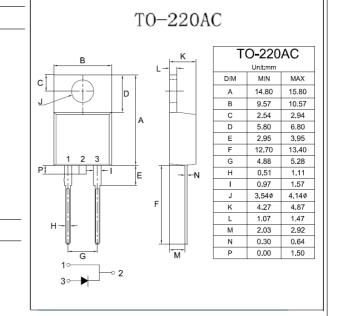
VOLTAGE 40 to 200 Volts

CURRENT

10 Amperes

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0.
 Flame Retardant Epoxy Molding Compound.
- Low power loss, high efficiency.
- · High current capability
- For use in low voltage, high frequency inverters free wheeling, and polarlity protection applications.
- · Lead free in compliance with EU RoHS .



MECHANICAL DATA

- Case: TO-220AC molded plastic
- Terminals: solder plated, solderable per MIL-STD-750, Method 2026
- · Polarity: As marked.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

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PARAMETER	SYMBOL	MBR1040	MBR1045	MBR1050	MBR1060	MBR1080	MBR1090	MBR10100	MBR10150	MBR10200	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 (See Figure 1)	$I_{F(AV)}$	10							A		
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{fsm}	100 120							A		
Maximum Forward Voltage at 10A	V _F	0.7 0.8			0.85			0.92		V	
Maximum DC Reverse Current at Rated DC Blocking T_=25°C Voltage T_=100°C	I _R	0.1 20									mA
Typical Thermal Resistance	$R_{_{ ext{ hetaJC}}}$	3								°C / W	
Operating Junction and Storage Temperature Range	T_,T _{stg}	-5 5 to +150 -65 to +175							°C		



RATING AND CHARACTERISTIC CURVES

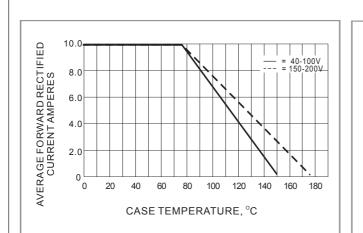
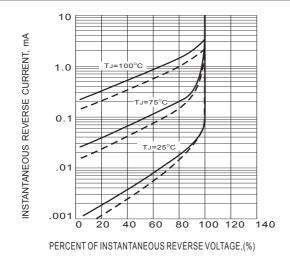


Fig.1- FORWARD CURRENT DERATING CURVE





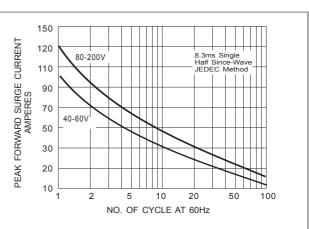


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

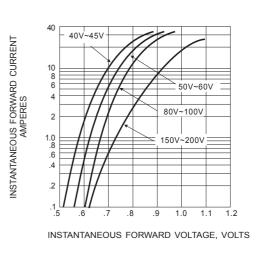


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



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