

MBR1040FCT~MBR10200FCT

10 AMPERES SCHOTTKY BARRIER RECTIFIERS

Voltage	40 to 200 Volts	Current	10 Amperes
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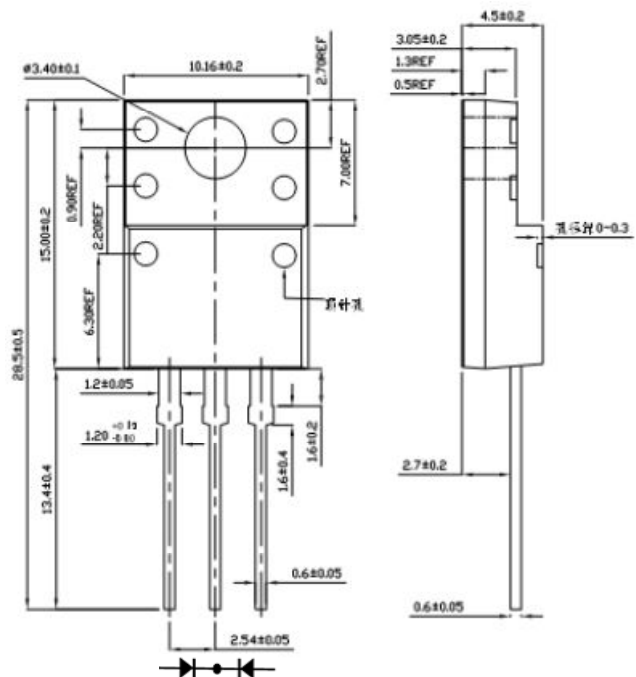
Features

- * Plastic package has underwriters laboratory Flammability classification 94v-O. Flame retardant epoxy Molding compound.
- * Metal silicon junction, majority carrier condition.
- * Low power loss, high efficiency.
- * High current capability
- * Guarding for overvoltage protection
- * 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: ITO-220AB molded plastic
- * Terminals: solder plated, solderable per MIL-750, Method 2026
- * Polarity: As marked
- * Mounting position: Any
- * Weight: 0.0655 ounces, 1.859 grams

DRAWING



Maximum ratings and Electrical Characteristics

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

PARAMETER	Symbol	MBR	MBR	MBR	MBR	MBR	MBR	MBR	Units			
		1040 FCT	1045 FCT	1050 FCT	1060 FCT	10100 FCT	10150 FCT	10200 FCT				
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	40	45	50	60	100	150	200	V			
Maximum RMS Voltage	V_{RMS}	40	45	50	60	100	150	200	V			
Maximum DC Blocking Voltage	V_{DC}	40	45	50	60	100	150	200	V			
Maximum Average Forward Current	$I_{F(AV)}$	10							A			
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	100							A			
Maximum Forward Voltage at 10A,per leg	V_F	0.7				0.9		1.0	V			
Macimum DC Reverse Current $T_J=25^{\circ}C$ at Rated DC Blocking Voltage $T_J=125^{\circ}C$	I_R	0.1							20	mA		
Typical Thermal Resistance	$R_{\theta jc}$	2							°C/W			
Operating Junction and Storage Temperature Range	T_{J,T_S} T_G	-50 to								+150	-40 to +175	°C

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RATING AND CHARACTERISTIC CURVES

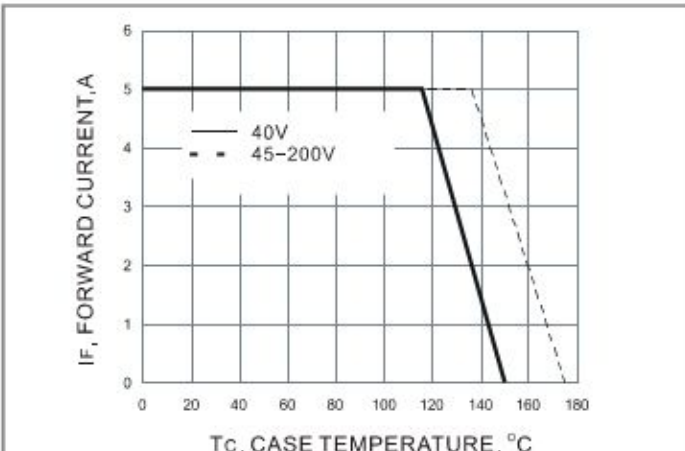


Fig.1- FORWARD CURRENT DERATING CURVE

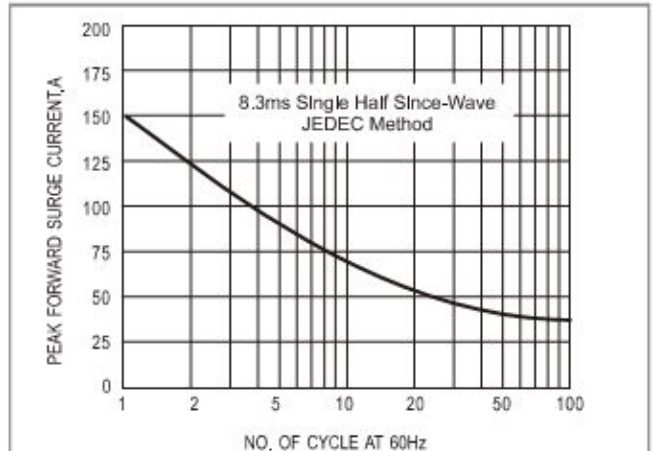


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

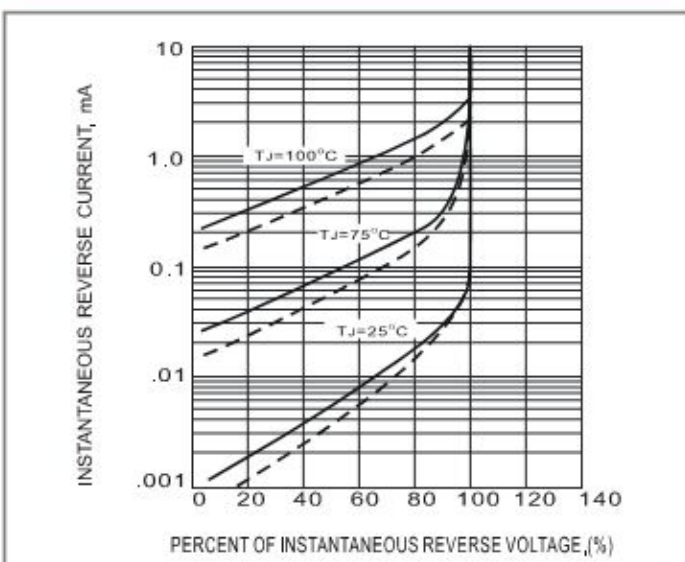


Fig.3- TYPICAL REVERSE CHARACTERISTICS

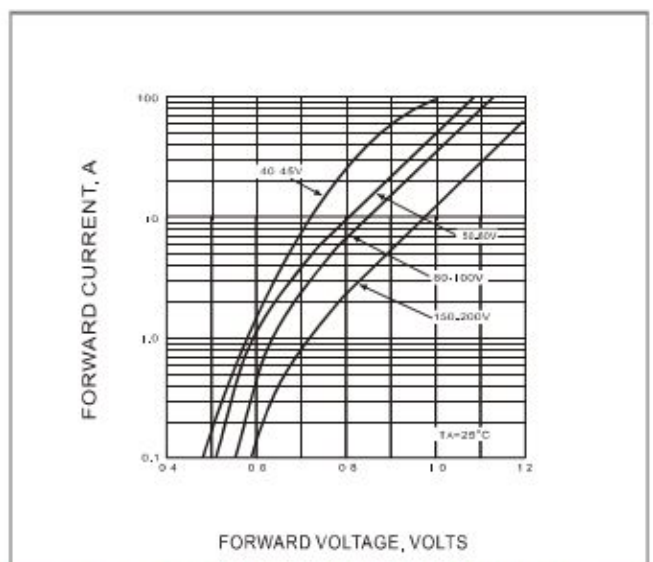


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC