

MBR1540FCT~MBR15200FCT

15 AMPERES SCHOTTKY BARRIER RECTIFIERS

Voltage	40 to 200 Volts	Current	15 Amperes
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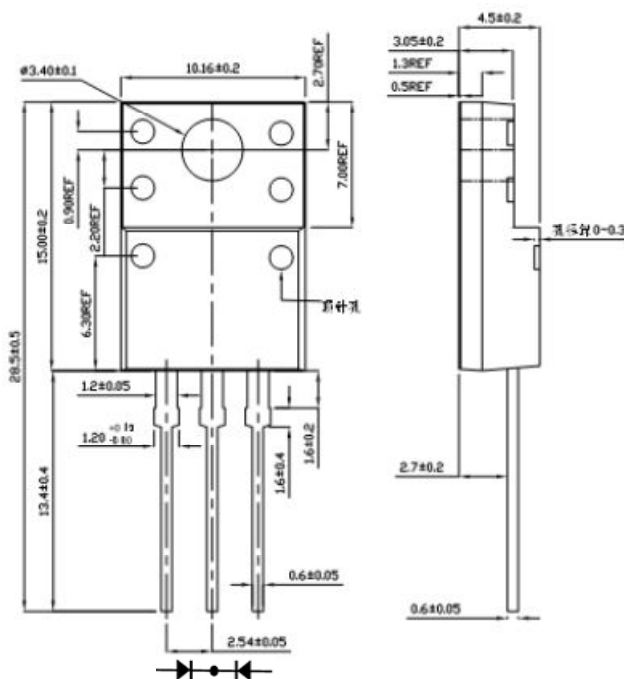
Features

- * 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	
		1540 FCT	1545 FCT	1550 FCT	1560 FCT	15100 FCT	15150 FCT	15200 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	$I_{F(AV)}$	15							A	
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	120							A	
Maximum Forward Voltage at 10A,per leg	V_F	0.7	0.75	0.8	0.9				V	
Macimum DC Reverse Current $T_J=25^\circ C$ at Rated DC Blocking Voltage $T_J=125^\circ C$	I_R	0.2							50	mA
Typical Thermal Resistance	$R_{\theta jc}$	2							$^\circ C/W$	
Operating Junction and Storage Temperature Range	T_{J,T_S} T_G	-50 to +150	-65 to +175						$^\circ C$	

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RATING AND CHARACTERISTIC CURVES

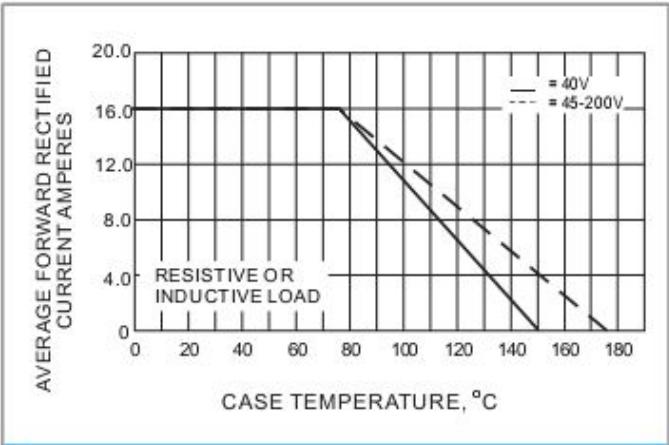


Fig.1- FORWARD CURRENT DERATING CURVE

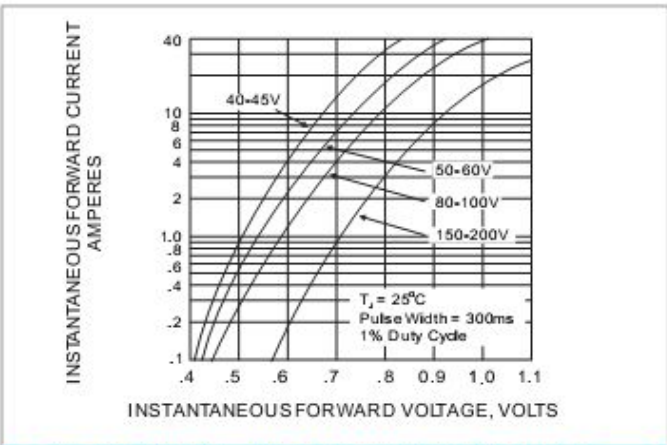


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

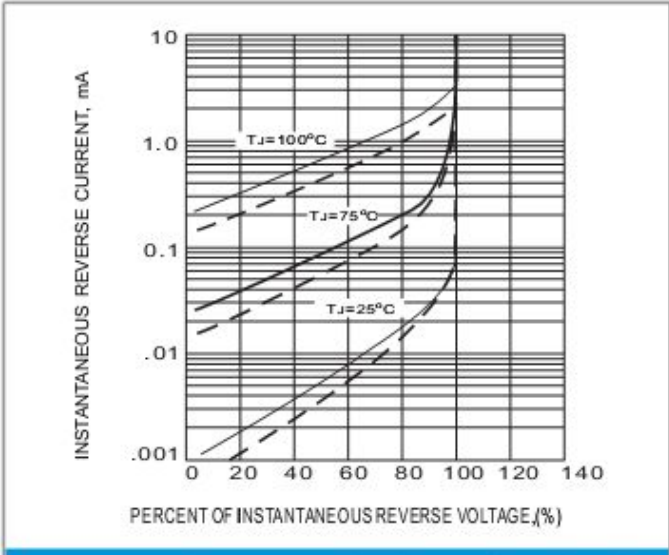


Fig.3- TYPICAL REVERSE CHARACTERISTICS

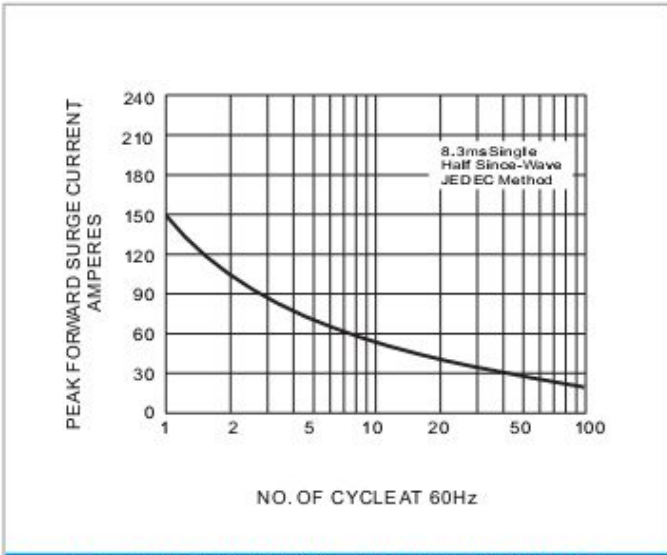


Fig.4- MAXIMUM NON-REPETITIVE SURGE CURRENT