

MBR1540CT~MBR15200CT

15 AMPERES SCHOTTKY BARRIER RECTIFIERS

DRAWING

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 over voltage protection
- ◆ For use in low voltage, high frequency inverters free wheeling, and polarity protection applications.
- ◆ In compliance with EU ROHS 2002/95/EC directives.
- ◆ Case:TO-220C



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	Symb ol	MBR 1540CT	MBR 1545CT	MBR 1550CT	MBR 1560CT	MBR 15100CT	MBR 15150CT	MBR 15200CT	Units	
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 7.5A,per leg	V _F	0.7	0.75	0.8	0.9				V	
Macimum DC Reverse Current TJ=25°C at Rated DC Blocking Voltage TJ=125°C	I _R	0.2							50	mA
Typical Thermal Resistance	R _{θjc}	2							°C/W	
Operating Junction and Storage Temperature Range	T _J ,T _{ST} G	-50 to +150	-65 to +175						°C	

Typical Characteristics

RATING AND CHARACTERISTIC CURVES

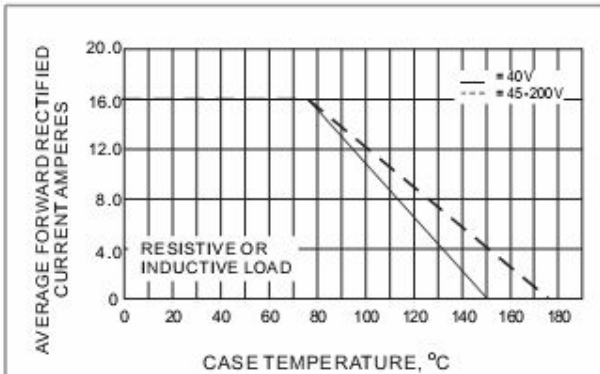


Fig.1- FORWARD CURRENT DERATING CURVE

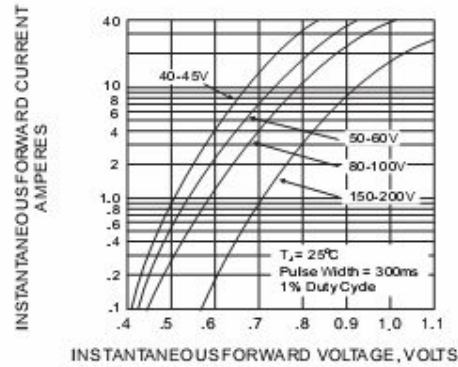


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

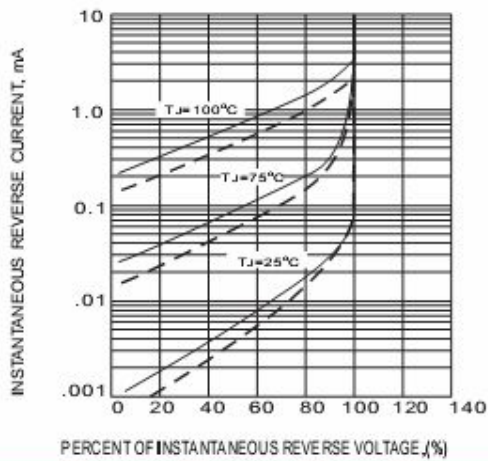


Fig.3- TYPICAL REVERSE CHARACTERISTICS

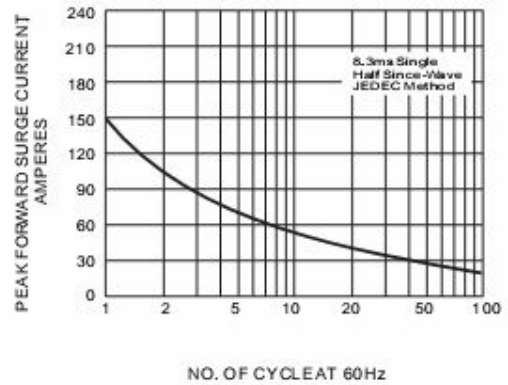


Fig.4- MAXIMUM NON-REPETITIVE SURGE CURRENT

Typical Characteristics

