

MBR2040CT~MBR20200CT

20 AMPERES SCHOTTKY BARRIER RECTIFIERS

DRAWING

Voltage	40 to 200 Volts	Current	20 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:TO-220C molded plastic
- ◆ Terminals: solder plated , solderable per MIL-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 phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

PARAMETER	Symb ol	MBR 2040CT	MBR 2045CT	MBR 2050CT	MBR 2060CT	MBR 20100CT	MBR 20150CT	MBR 20200CT	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)}	20							A	
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	175							A	
Maximum Forward Voltage at 10A,per leg	V _F	0.7		0.85			1.0		V	
Macimum DC Reverse Current T _J =25°C at Rated DC Blocking Voltage T _J =125°C	I _R	0.1							50	mA
Typical Thermal Resistance	R _{θjc}	4							°C/W	
Operating Junction and Storage Temperature Range	T _J ,T _{ST} G	-50 to +150		-65 to +175					°C	

Typical Characteristics

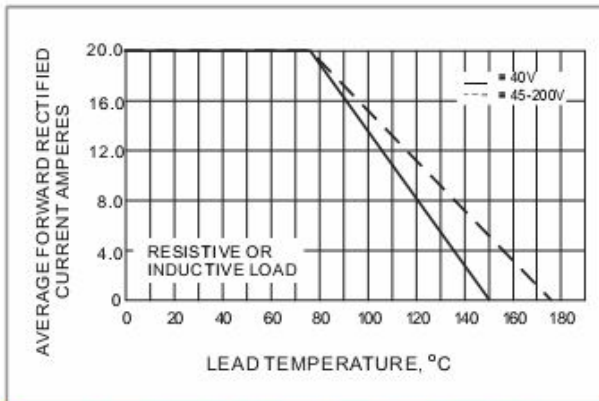


Fig.1- FORWARD CURRENT DERATING CURVE

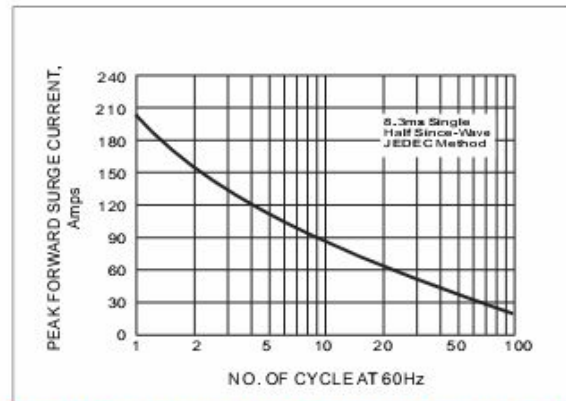


Fig.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

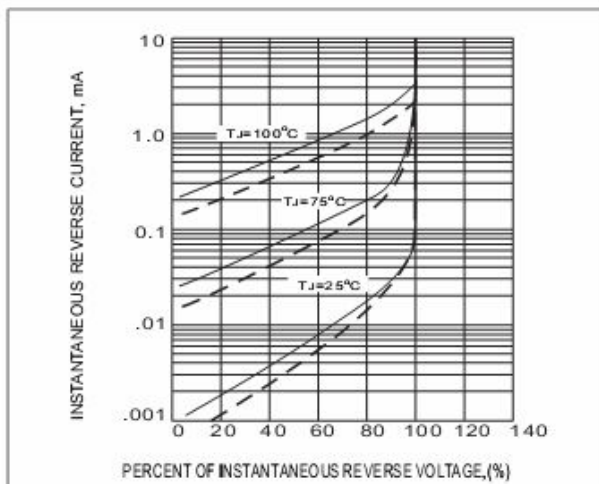


Fig.3- TYPICAL REVERSE CHARACTERISTICS

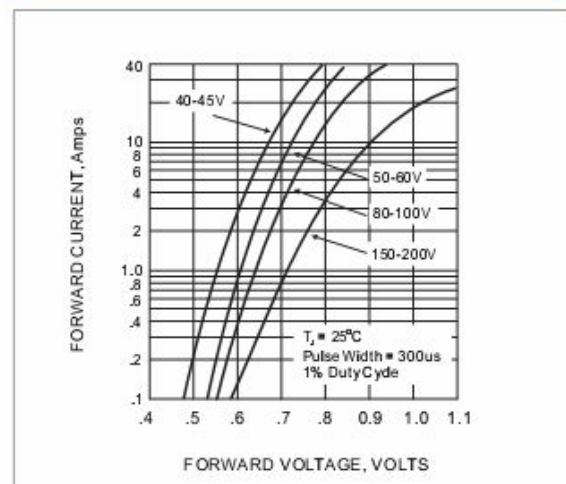


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

Mechanical Dimensions

