

**MBR3040FCT~MBR30200FCT**

**30 AMPERES SCHOTTKY BARRIER RECTIFIERS**

DRAWING

Voltage	40 to 200 Volts	Current	30 Amperes
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**Feature**

- ◆ 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.
- ◆ Case: ITO-220AB



**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	Sym bol	MBR3040 FCT	MBR30 45FCT	MBR30 50FCT	MBR30 60FCT	MBR30 100FCT	MBR30 150FCT	MBR30 200FCT	Units	
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	40	45	50	60	100	150	200	V	
Maximum RMS Voltage	V <sub>RMS</sub>	40	45	50	60	100	150	200	V	
Maximum DC Blocking Voltage	V <sub>DC</sub>	40	45	50	60	100	150	200	V	
Maximum Average Forward Current	I <sub>F(AV)</sub>	30							A	
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	200							A	
Maximum Forward Voltage at 15A,per leg	V <sub>F</sub>	0.7	0.85		0.9	1.1	1.0		V	
Maximum DC Reverse Current T <sub>J</sub> =25°C at Rated DC Blocking Voltage T <sub>J</sub> =125°C	I <sub>R</sub>	0.2							50	mA
Typical Thermal Resistance	R <sub>θjc</sub>	3							°C/W	
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>ST</sub> G	-50 to +150	-65 to +175						°C	

Typical Characteristics

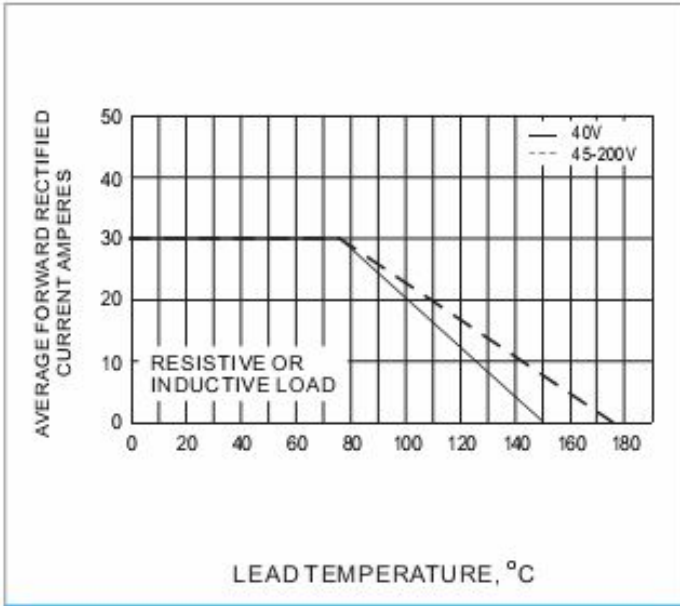


Fig.1- FORWARD CURRENT DERATING CURVE

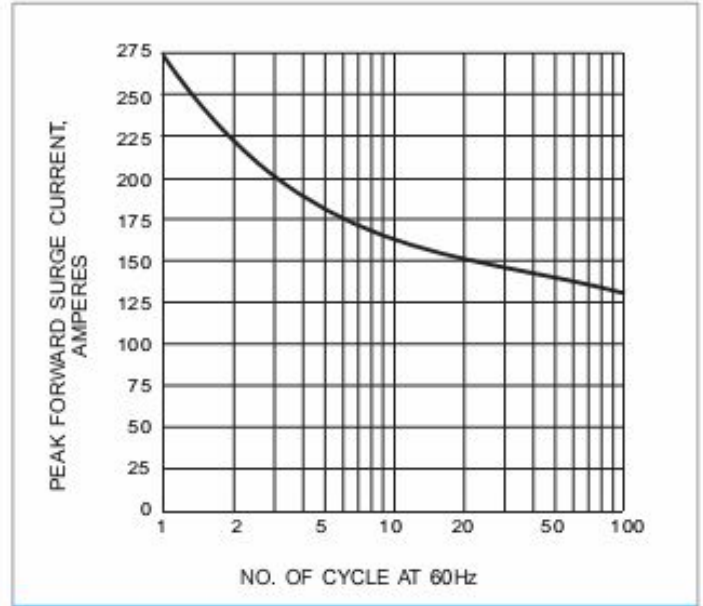


Fig.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

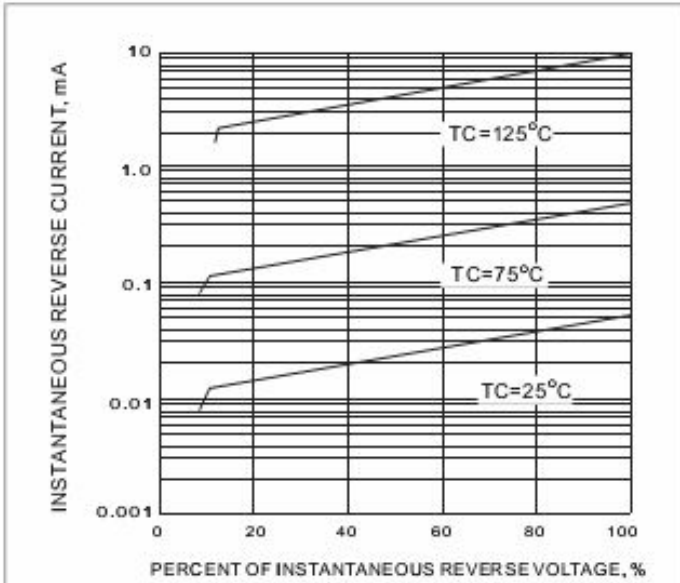


Fig.3- TYPICAL REVERSE CHARACTERISTIC

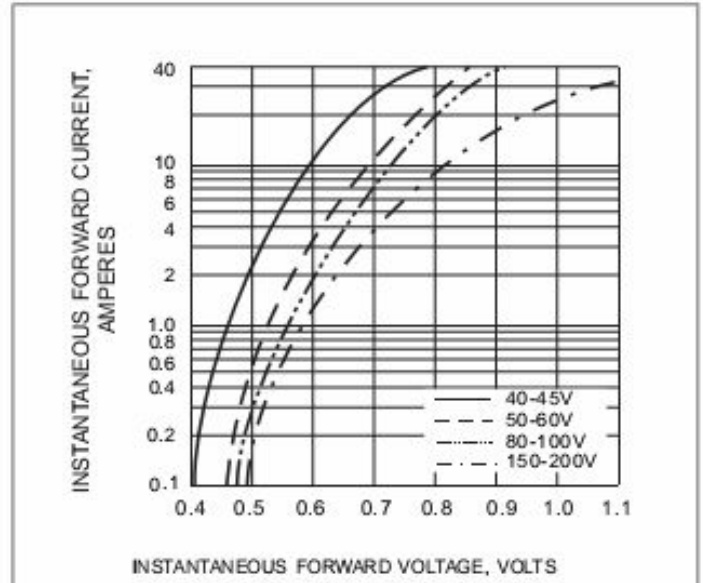


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

Mechanical Dimensions

