

MBR4040FCT~MBR40200FCT

40 AMPERES SCHOTTKY BARRIER RECTIFIERS

DRAWING

Voltage	40 to 200 Volts	Current	40 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: 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	Symb ol	MBR404 0FCT	MBR40 45FCT	MBR40 50FCT	MBR40 60FCT	MBR40 100FCT	MBR40 150FCT	MBR40 200FCT	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)}	40							A	
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	250							A	
Maximum Forward Voltage at 20A,per leg	V _F	0.7	0.75		1.2		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}	1.2							°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

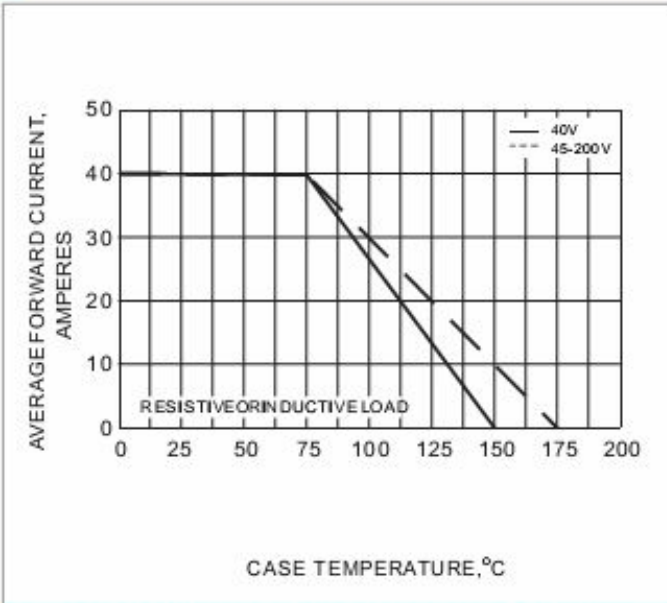


Fig. 1-FORWARD CURRENT DERATING CURVE

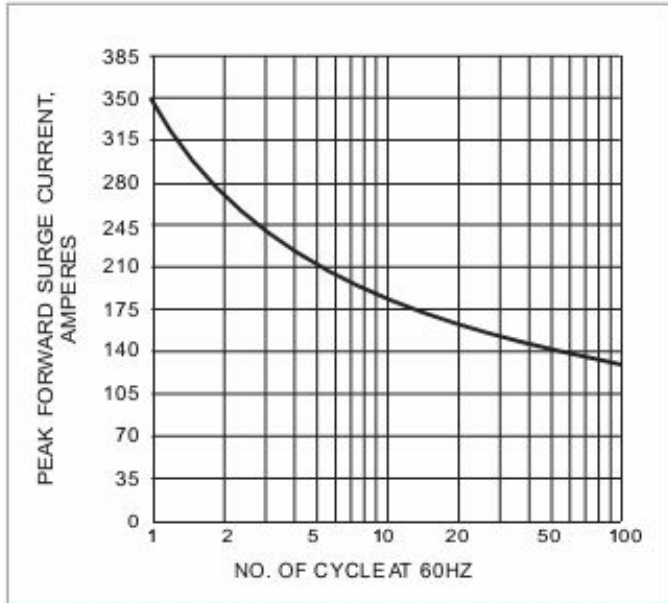


Fig. 2-MAXMUM NON-REPETITIVE SURGE CURRENT

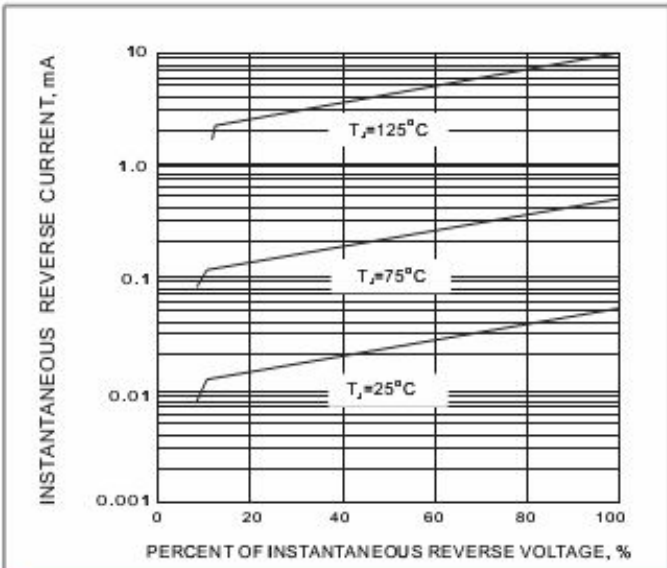


Fig. 3-TYPICAL REVERSE CHARACTERISTIC

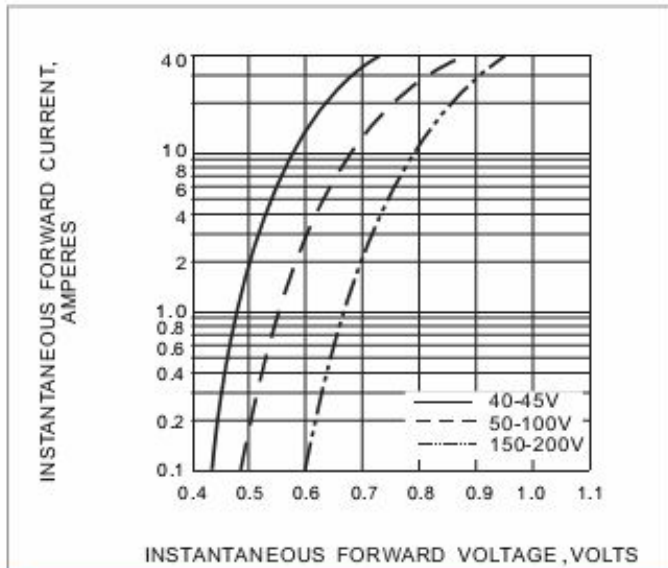


Fig. 4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

Mechanical Dimensions

