

MBR3040CT~MBR30200CT

30 AMPERES SCHOTTKY BARRIER RECTIFIERS

Voltage	40 to 200 Volts	Current	30 Amperes
---------	-----------------	---------	------------

DRAWING



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	Symbol	MBR	MBR	MBR	MBR	MBR	MBR	MBR	Units	
		3040CT	3045CT	3050CT	3060CT	30100CT	30150CT	30200CT		
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	$I_{F(AV)}$	30							A	
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	200							A	
Maximum Forward Voltage at 15A,per leg	V_F	0.7	0.85	0.9	1.1	1.0			V	
Maximum 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	$R_{\theta jc}$	3							$^\circ C/W$	
Operating Junction and Storage Temperature Range	$T_{J, T_{ST}}$ G	-50 to +150						-65 to +175	$^\circ C$	

Typical Characteristics

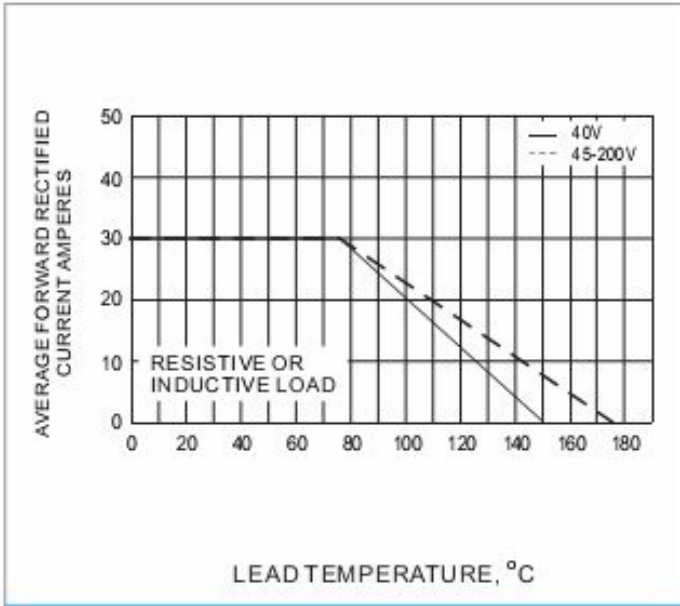


Fig.1- FORWARD CURRENT DERATING CURVE

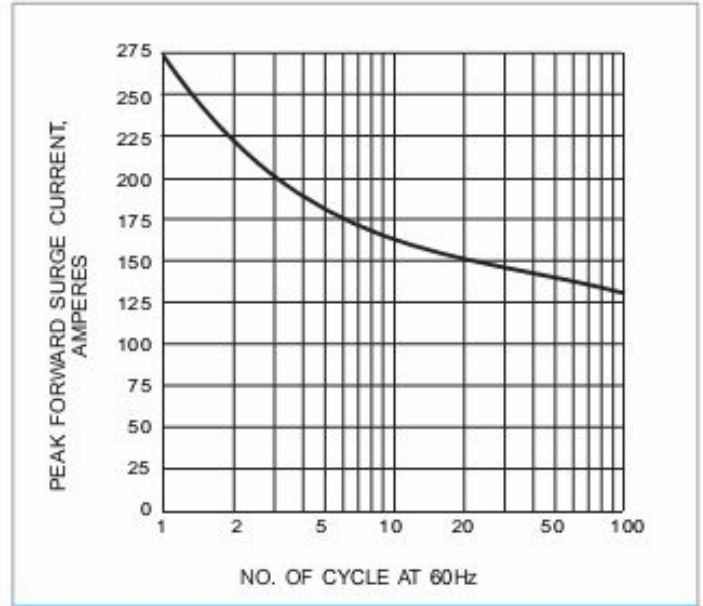


Fig.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

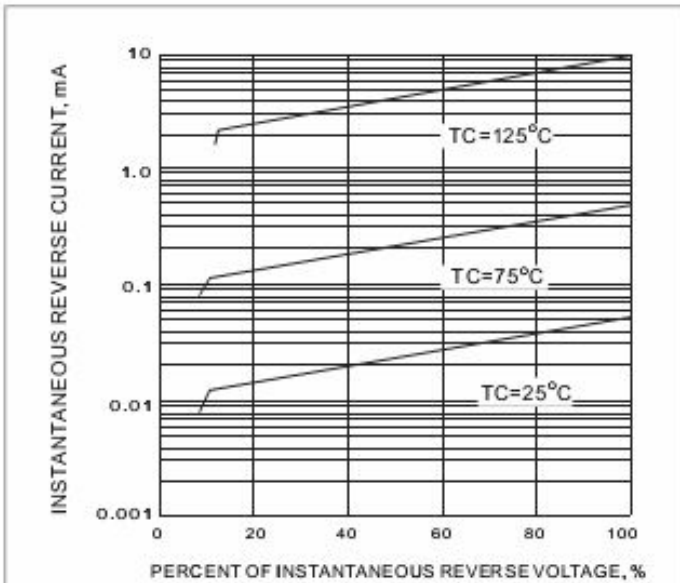


Fig.3- TYPICAL REVERSE CHARACTERISTIC

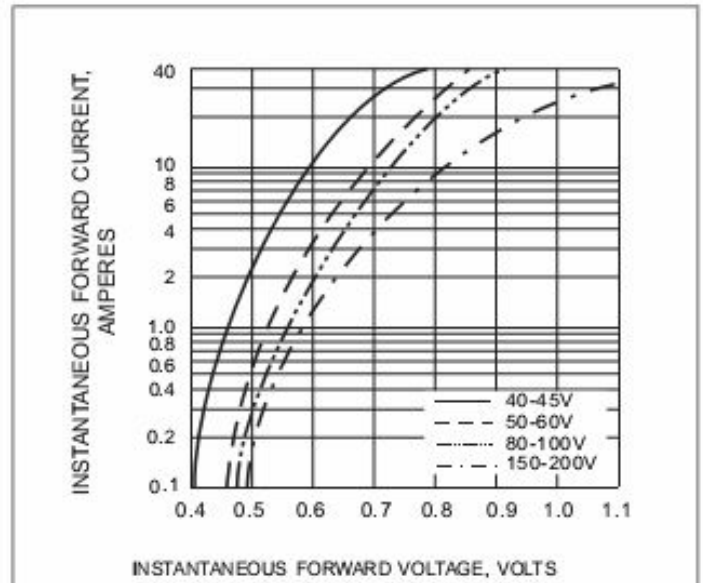


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

Mechanical Dimensions

