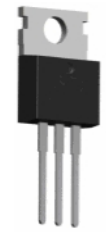
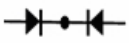
MBR3040CT~MBR30200CT

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℃ ambient temperature unless otherwise specified phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

PARAMETER	Symbol	MBR 3040CT	MBR 3045CT	MBR 3050CT	MBR 3060CT	MBR 30100CT	MBR 30150CT	MBR 30200CT	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	$I_{F(AV)}$	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 TJ=25℃ at Rated DC Blocking Voltage TJ=125℃	I_R	0.2 50							mA
Typical Thermal Resistance	$R_{\Theta jc}$	3							℃/W
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-50 to +150	-65 to +175						℃

Typical Characteristics

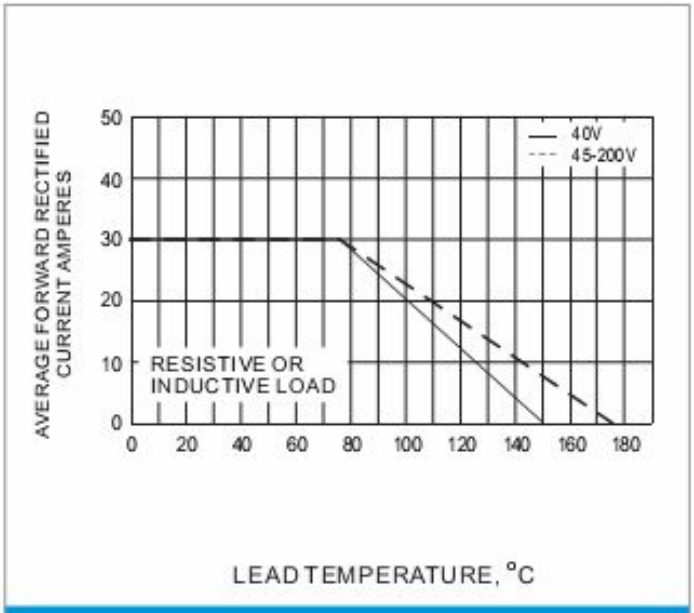


Fig.1- FORWARD CURRENT DERATING CURVE

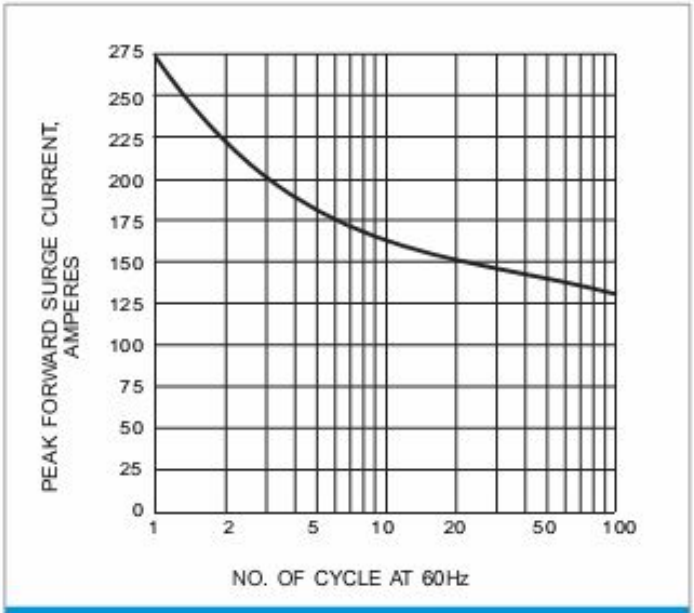


Fig.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

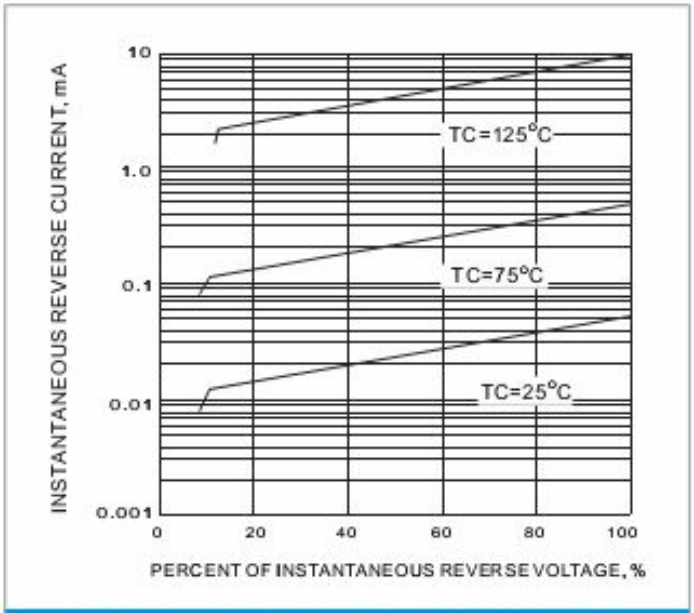


Fig.3- TYPICAL REVERSE CHARACTERISTIC

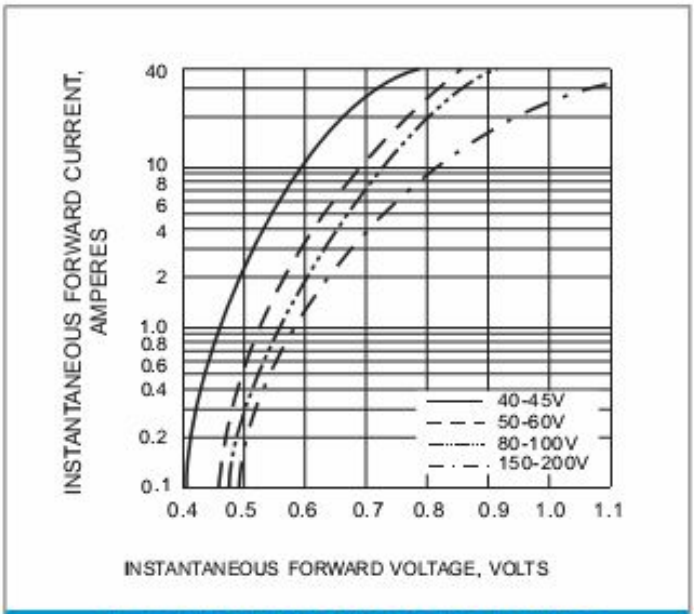


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

Mechanical Dimensions