



YEA SHIN TECHNOLOGY CO., LTD MBR3040CT THRU MBR30200CT
30 AMPERE SCHOTTKY BARRIER RECTIFIERS
VOLTAGE - 40 to 200 Volts CURRENT - 30.0 Amperes

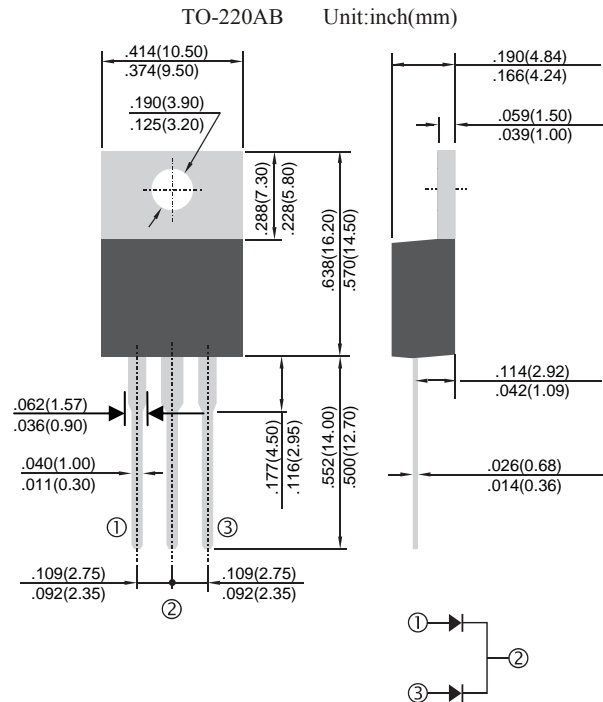


FEATURES

Plastic package has Underwriters Laboratory
Flammability Classification 94V-0 utilizing
Flame Retardant Epoxy Molding Compound
Exceeds environmental standards of MIL-S-19500/228
Low power loss, high efficiency
Low forward voltage, high current capability
High surge capacity
For use in low voltage, high frequency inverters,
free wheeling, and polarity protection applications
High temperature soldering : 260°C / 10 seconds at terminals
Pb free product at available : 99% Sn above meet RoHS
environment substance directive request

MECHANICAL DATA

Case: TO-220AB molded plastic
Terminals: Lead, solderable per MIL-STD-202, Method 208
Polarity: As marked
Mounting Position: Any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single 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 3080CT	MBR 30100CT	MBR 30150CT	MBR 30200CT	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	40	45	50	60	80	100	150	200	V
Maximum RMS Voltage	V _{RMS}	28	32	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	V _{DC}	40	45	50	60	80	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
Forward Voltage I _F =15A	V _F	0.7		0.8		0.85		0.92		V
Maximum DC Reverse Current at T _A =25℃	I _R	0.05								mA
at Raged DC Blocking Voltage T _A =125℃		20								
I ² t Raging for Fusing (t<8.3ms)	I ² t	166								A ² S
Typical Thermal Resistance (Note3)	R _{θJA}	1.4								℃/W
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150						-55 to +175		℃

DEVICE CHARACTERISTICS

MBR3040CT THRU MBR30200CT

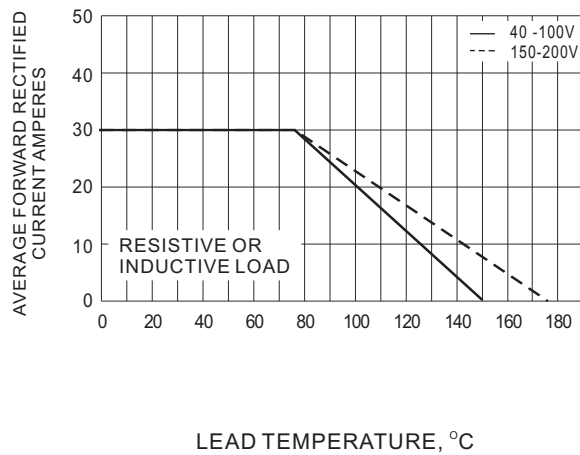


Fig.1- FORWARD CURRENT DERATING CURVE

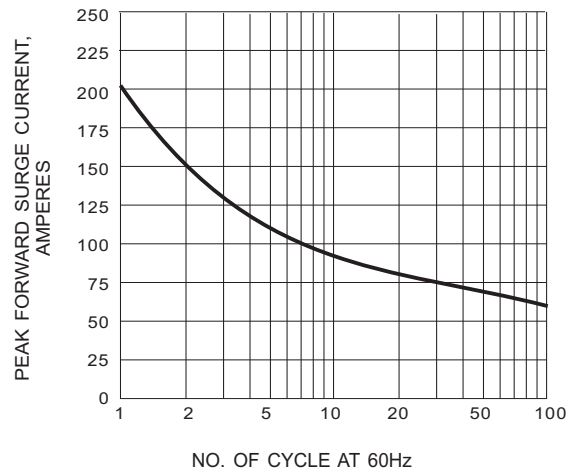


Fig.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

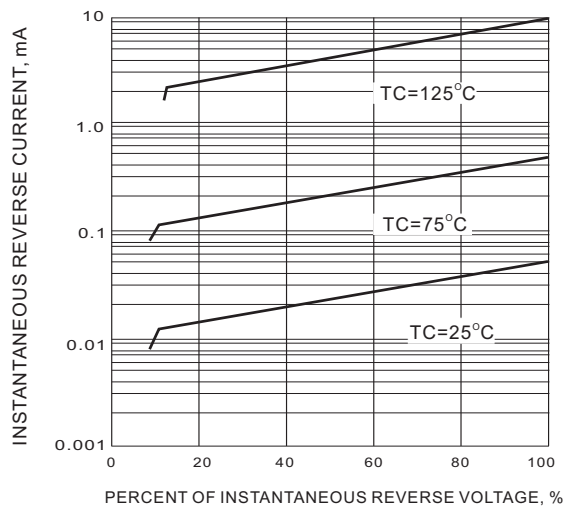


Fig.3- TYPICAL REVERSE CHARACTERISTIC

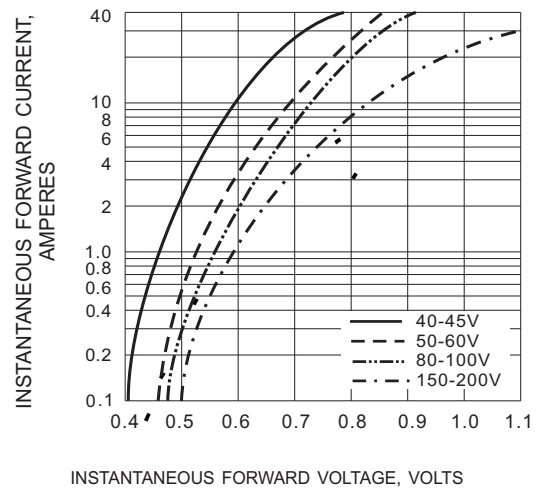


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC