



YEA SHIN TECHNOLOGY CO., LTD

MBR3040CD2 THRU MBR30200CD2

30A Schottky Barrir Rectifiers

Voltage - 40 to 200 Volts Current - 30 Amperes

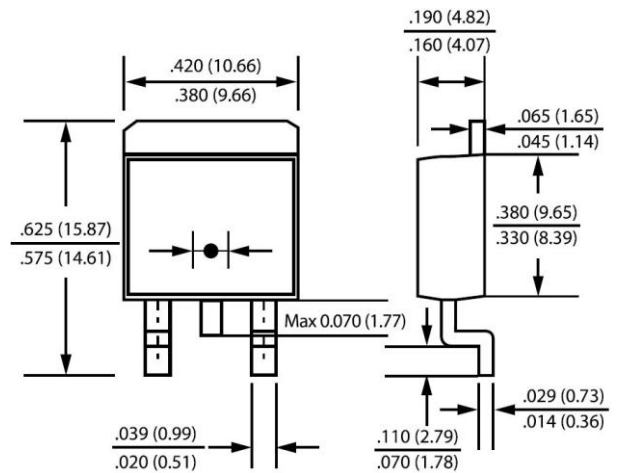


FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0. Flame Retardant Epoxy Molding Compound.
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency.
- High current capability
- For use in low voltage, high frequency inverters free wheeling, and polarity protection applications.
- Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- Case: TO-263AB molded plastic
- Terminals: solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Mounting Position: Any



TO-263AB

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

PARAMETER	SYMBOL	MBR 3040CD2	MBR 3045CD2	MBR 3050CD2	MBR 3060CD2	MBR 3080CD2	MBR 3090CD2	MBR 30100CD2	MBR 30150CD2	MBR 30200CD2	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	40	45	50	60	80	90	100	150	200	V
Maximum RMS Voltage	V _{RMS}	28	31.5	35	42	56	63	70	105	140	V
Maximum DC Blocking Voltage	V _{DC}	40	45	50	60	80	90	100	150	200	V
Maximum Average Forward Current	I _{F(AV)}	30									A
Peak Forward Surge Current : 8.3 ms 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		0.8		0.85			0.92		V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _J =25 °C T _J =125°C I _R	0.05 20									mA
Typical Thermal Resistance	R _{θJC}	1.4									°C / W
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-55 to + 150							-55 to + 175		°C

DEVICE CHARACTERISTICS

MBR3040CD2 THRU MBR30200CD2

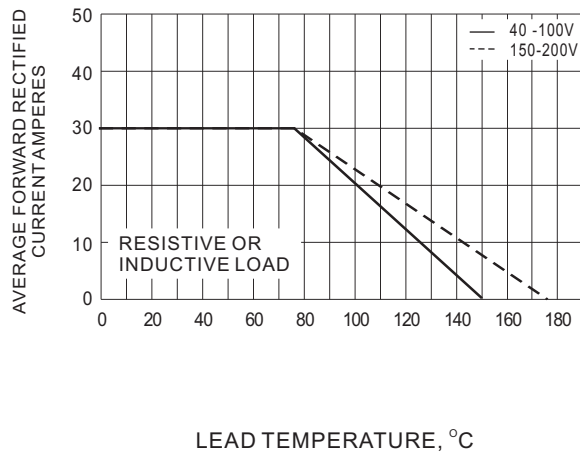


Fig.1- FORWARD CURRENT DERATING CURVE

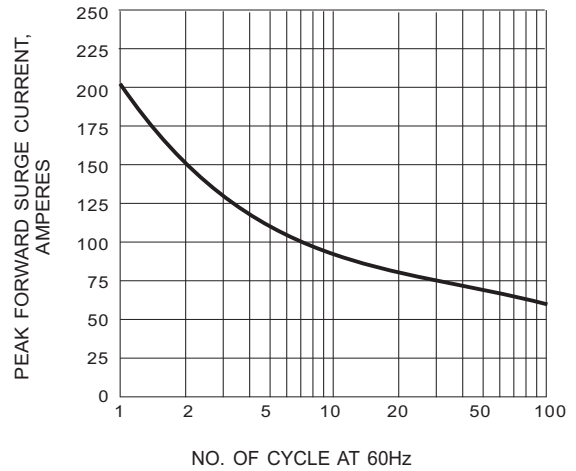


Fig.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

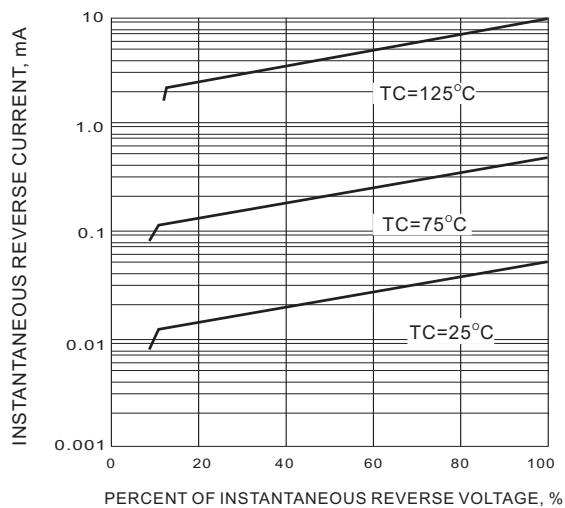


Fig.3- TYPICAL REVERSE CHARACTERISTIC

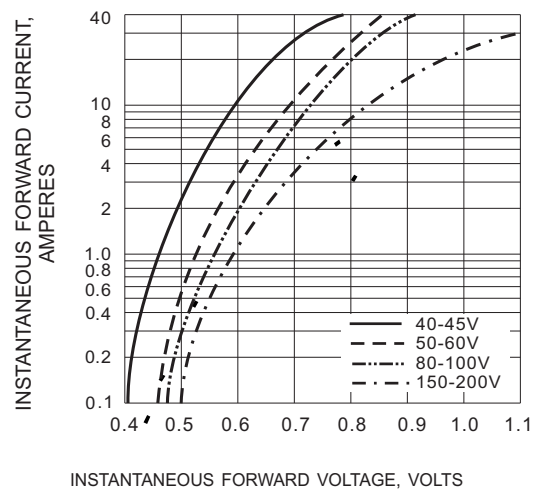


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC