



MBR2040DCT-MBR20200DCT

20.0Amp Schottky Barrier Rectifiers

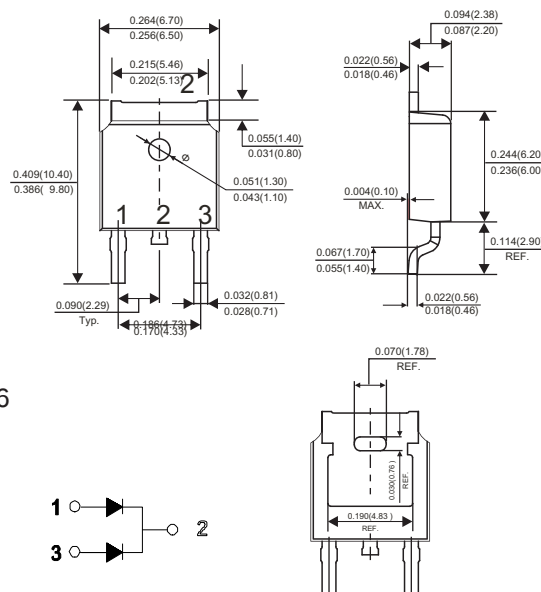
FEATURES

- 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

MECHANICAL DATA

- Case: TO-252(D-Pack) Molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As Marked
- Mounting position: Any

TO-252



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, de-rate current by 20%.)

Parameter		Symbol	Part Number						Unit
			MBR 2040DCT	MBR 2045DCT	MBR 2060DCT	MBR 20100DCT	MBR 20150DCT	MBR 20200DCT	
Maximum Recurrent Peak Reverse Voltage		V _{RRM}	40	45	60	100	150	200	V
Maximum RMS Voltage		V _{RMS}	28	31.5	42	70	105	140	V
Maximum DC Blocking Voltage		V _{DC}	40	45	60	100	150	200	V
Maximum Average Forward Current see fig.1		I _{F(AV)}	20						A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load(JEDEC method)		I _{FSM}	100						A
Maximum Forward Voltage @10A 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℃	I _R	0.05						mA
	T _J =125℃		20						
Typical Thermal Resistance		R _{θJC}	6						℃/W
Operating & Storage Temperature		T _J , T _{STG}	-50~150						℃

RATINGS AND CHARACTERISTIC CURVES

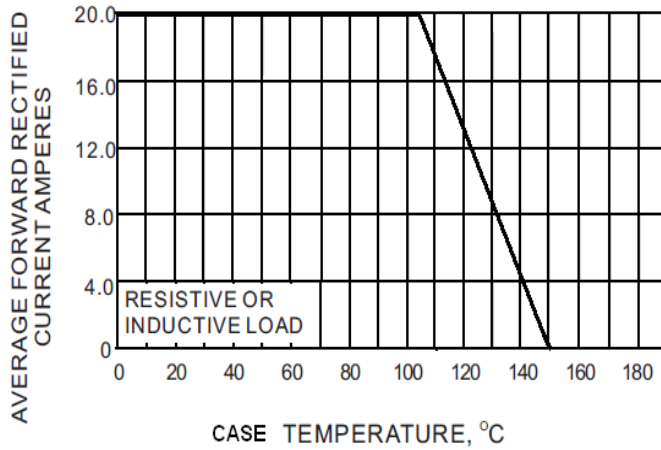


Fig.1- FORWARD CURRENT DERATING CURVE

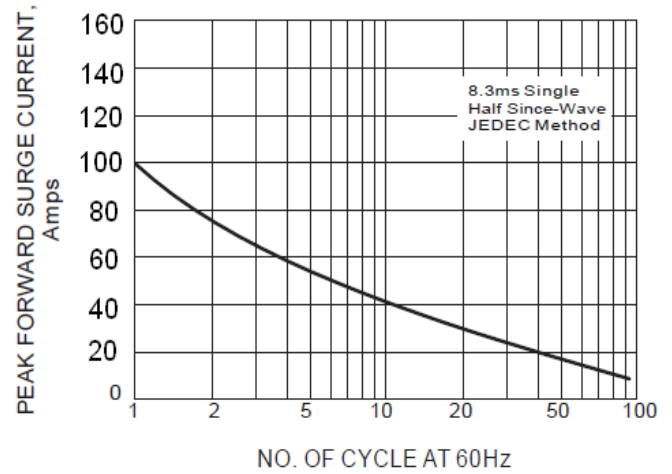


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

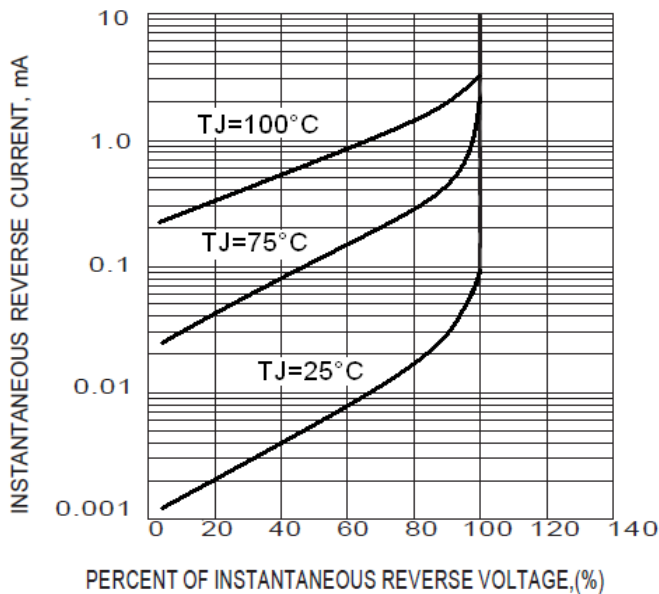


Fig.3- TYPICAL REVERSE CHARACTERISTICS

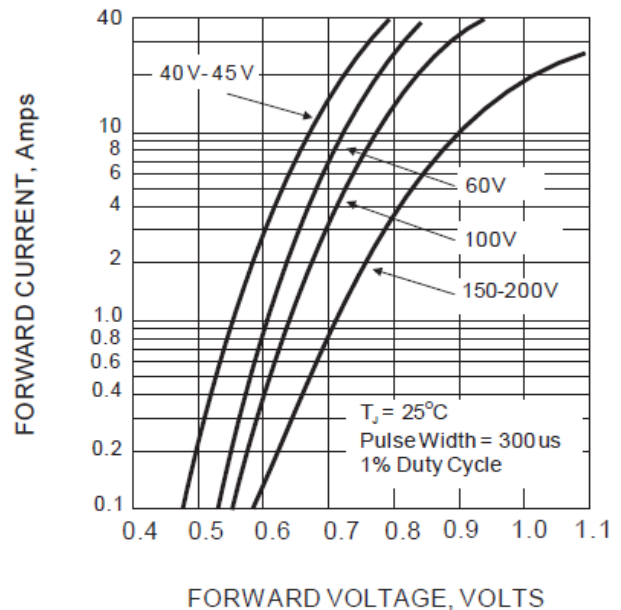
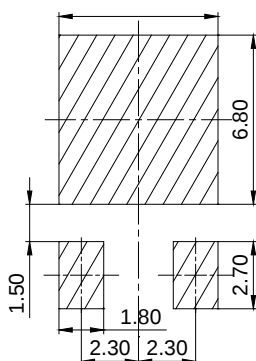


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

Suggested Pad Layout



Unit: mm