MBR2040FCT~MBR20200FCT

20 AMPERES SCHOTTKY BARRIER RECTIFIERS

VOLTAGE RANGE
40 to 200 Volts

CURRENT
20.0 Ampere

FEATURES

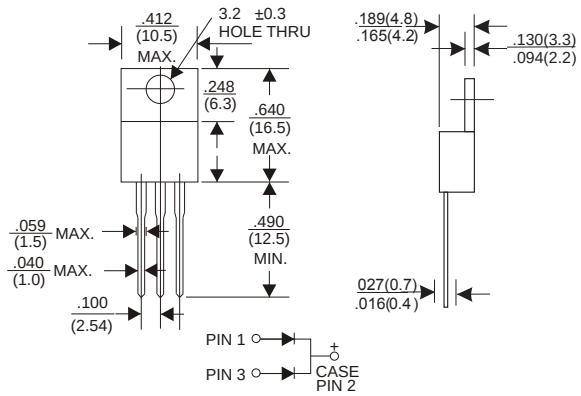
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O. Flame Retardant Epoxy Molding Compound.
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency.
- High current capability
- Guardring for overvlotage protection
- For use in low voltage,high frequency inverters free wheeling , and polarlity protection applications.
- In compliance with EU RoHS 2002/95/EC directives

* Lead Free Finish/RoHS Compliant

MECHANICALDATA

- Case: ITO-220AB molded plastic
- Terminals: solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Mounting Position: Any
- Weight: 1.81 grams.

ITO-220AB



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	MBR2040 FCT	MBR2045 FCT	MBR2050 FCT	MBR2060 FCT	MBR2080 FCT	MBR2090 FCT	MBR20100 FCT	MBR20150 FCT	MBR20200 FCT	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 (See fig.1)	$I_{F(AV)}$	20									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 10A, per leg	V_F	0.65		0.75		0.85			0.9	0.95	V
Maximum DC Reverse Current T_J=25 °C at Rated DC Blocking Voltage T_J=125°C	I_R	0.5									mA
		30		50							mA
Typical Thermal Resistance	$R_{\theta JC}$	5.0									°C / W
Operating and Storage Junction Temperature Range	T_J,T_{STG}	-65to+150									°C
Voltage rate of change (Rated VR)	dV/dt	10000									V/μs

Notes :
Both Bonding and Chip structure are available.

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RATING AND CHARACTERISTIC CURVES (MBR2040FCT THRU MBR20200FCT)

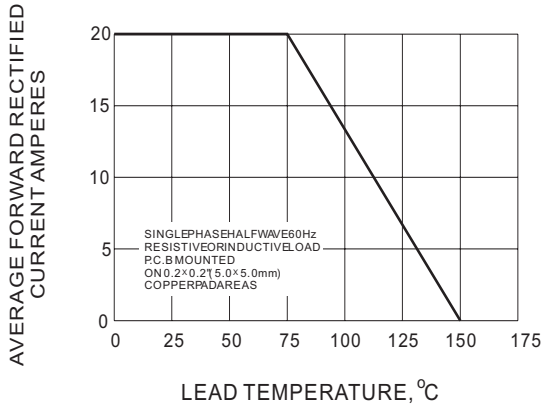


Fig.1-FORWARD CURRENT DERATING CURVE

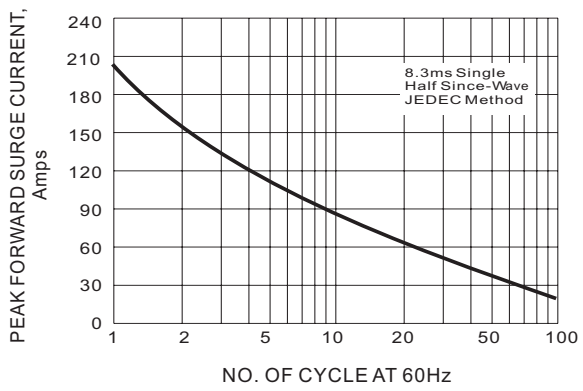


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

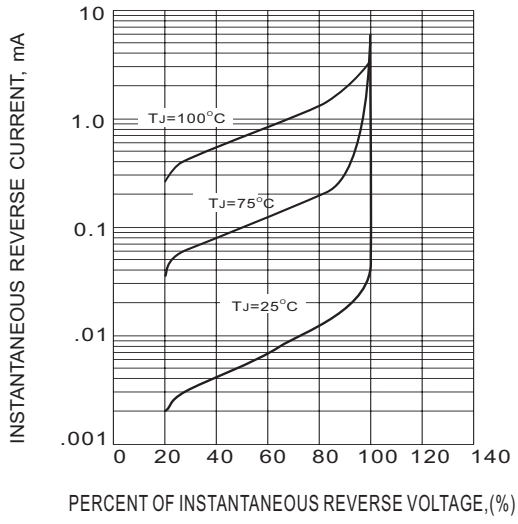


Fig.3- TYPICAL REVERSE CHARACTERISTICS

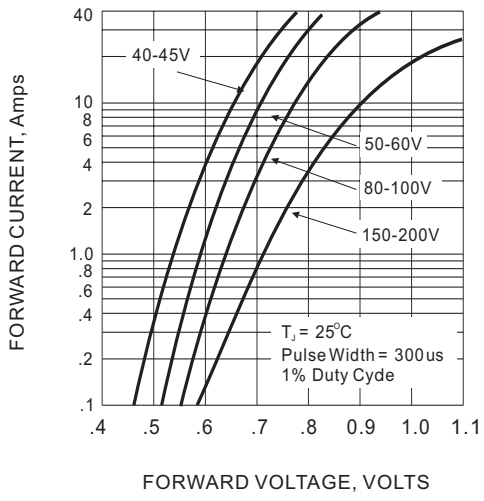


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

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