

MBR2040FCT~MBR20200FCT

20 AMPERES SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 40 to 200 Volts **CURRENT** 20 Amperes

ITO-220AB

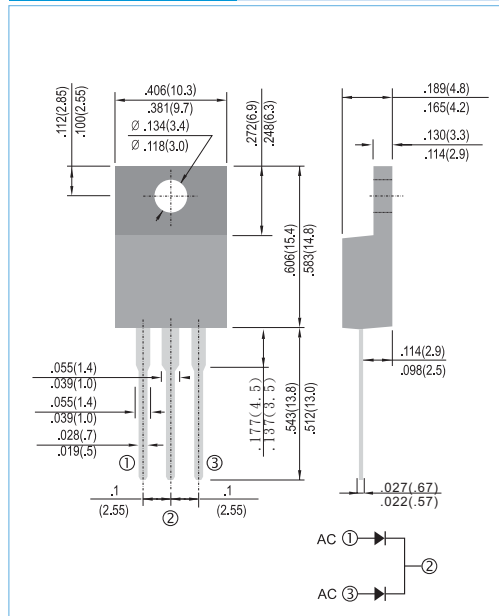
Unit: inch (mm)

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 overvoltage protection
- For use in low voltage,high frequency inverters free wheeling , and polarity protection applications.
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: ITO-220AB molded plastic
- Terminals: solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Mounting Position: Any
- Weight: 0.055 ounces, 1.5615 grams.



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	MBR2040FCT	MBR2045FCT	MBR2050FCT	MBR2060FCT	MBR2080FCT	MBR2090FCT	MBR20100FCT	MBR20150FCT	MBR20200FCT	UNIT
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	0.7		0.75		0.8			0.9		V
Maximum DC Reverse Current T _J =25 °C at Rated DC Blocking Voltage T _J =125°C	I _R	0.05 20									mA
Typical Thermal Resistance	R _{θJC}	2									°C / W
Operating and Storage Junction Temperature Range	T _J , T _{STG}	-55 to +150	-65 to +175								°C

Notes :

Both Bonding and Chip structure are available.

MBR2040FCT~MBR20200FCT

RATING AND CHARACTERISTIC CURVES

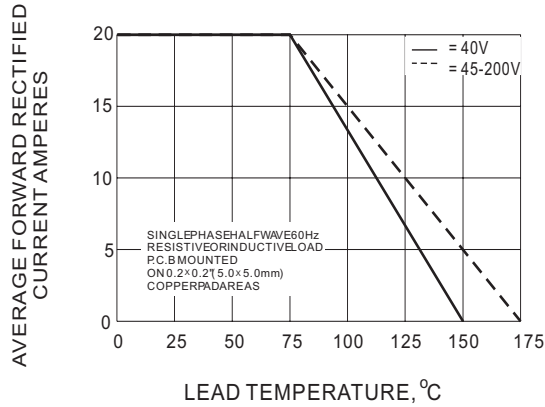


Fig.1-FORWARD CURRENT DERATING CURVE

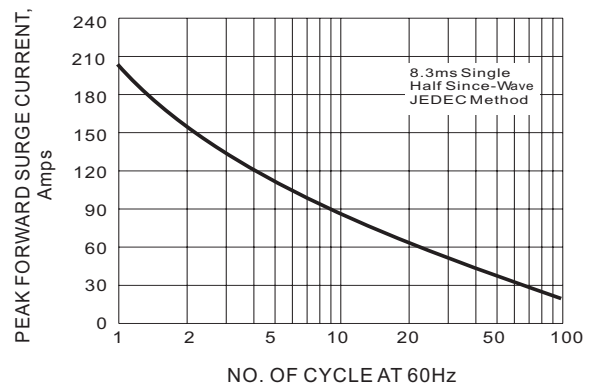


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

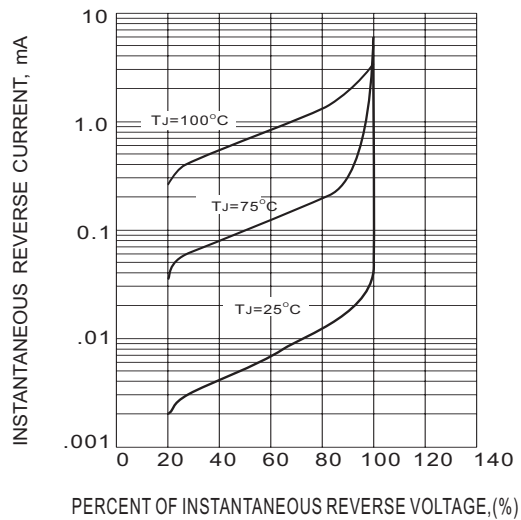


Fig.3- TYPICAL REVERSE CHARACTERISTICS

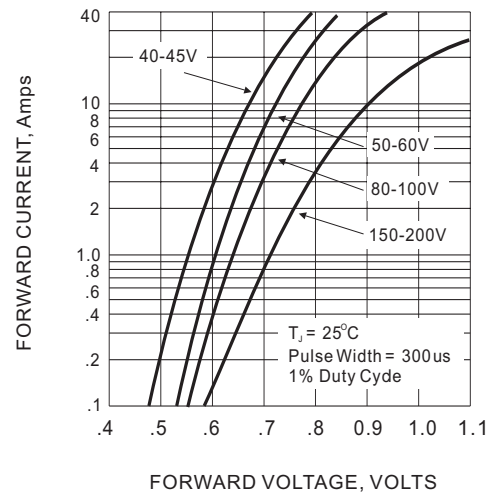


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS