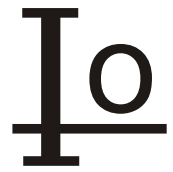


MBR20100FCT

20 AMPERES SCHOTTKY BARRIER RECTIFIERS



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

*Lead Free Finish/RoHS Compliant

MECHANICAL DATA

- 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.

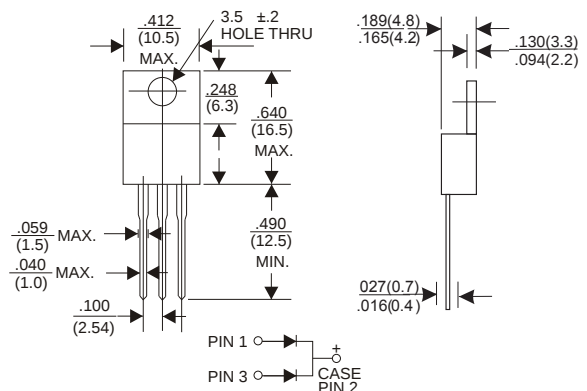
VOLTAGE RANGE

100 Volts

CURRENT

20.0 Ampere

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	MBR20100FCT	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	V
Maximum RMS Voltage	V_{RMS}	70	V
Maximum DC Blocking Voltage	V_{DC}	100	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	0.85	V
Maximum DC Reverse Current $T_J=25^{\circ}C$ at Rated DC Blocking Voltage $T_J=125^{\circ}C$	I_R	0.5 50	mA
Typical Thermal Resistance	$R_{\theta JC}$	5	$^{\circ}C / W$
Operating and Storage Junction Temperature Range	T_J, T_{STG}	-65 to +150	$^{\circ}C$
Voltage Rate of Change (Rated V_R)	dv/dt	10,000	V/ μs

Notes :

Both Bonding and Chip structure are available.

RATING AND CHARACTERISTIC CURVES (MBR20100FCT)

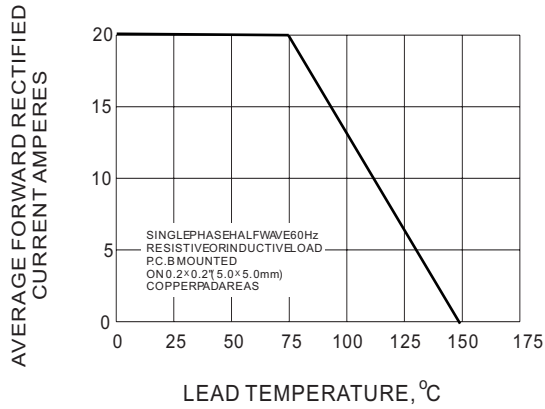


Fig.1-FORWARD CURRENT DERATING CURVE

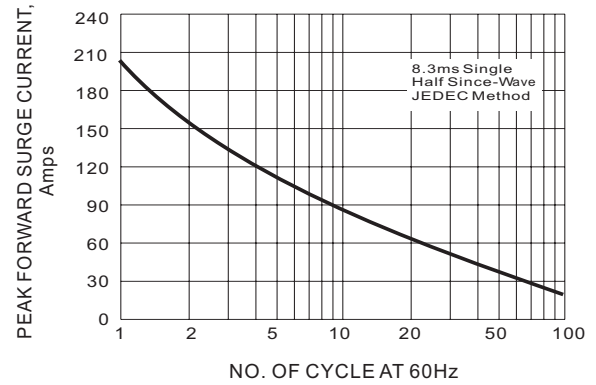


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

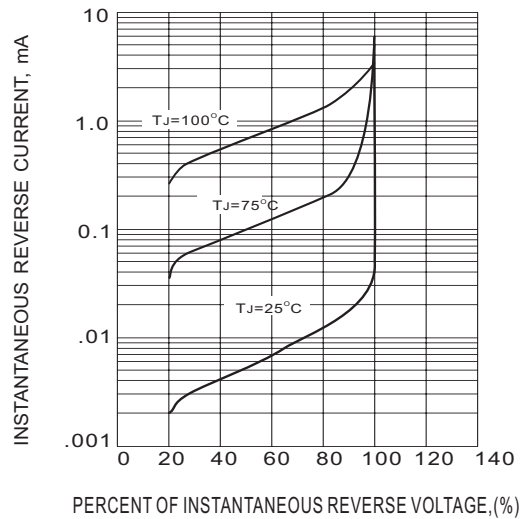


Fig.3- TYPICAL REVERSE CHARACTERISTICS

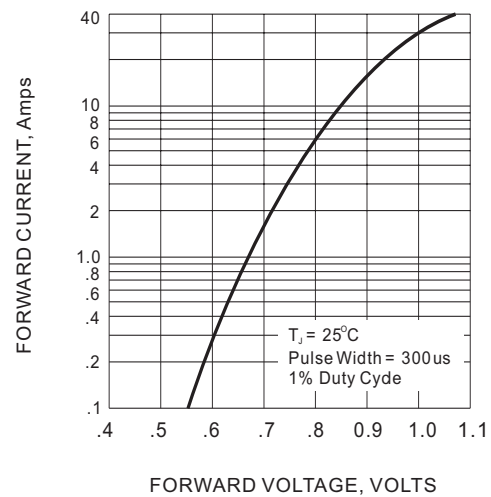


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS