MBR2040FCT ~ MBR20200FCT

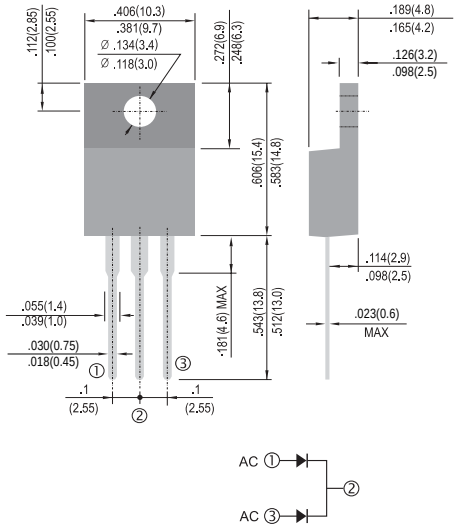
20 AMPERES SCHOTTKY BARRIER RECTIFIERS

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

Green

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 overvlotage protection
- For use in low voltage,high frequency inverters free wheeling , and polarlity protection applications.
- Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

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

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 2040FCT	MBR 2045FCT	MBR 2050FCT	MBR 2060FCT	MBR 2080FCT	MBR 2090FCT	MBR 20100FCT	MBR 20150FCT	MBR 20200FCT	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 10									A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	250									A
Maximum Forward Voltage at 10A, per leg	V_F	0.55		0.7		0.85			0.95		V
Maximum DC Reverse Current T_J=25°C at Rated DC Blocking Voltage T_J=125°C	I_R	0.2 20									mA
Typical Thermal Resistance	$R_{\theta JC}$	2									°C / W
Operating and Storage Junction Temperature Range	T_J, T_{STG}	-55 to + 125				-55 to +175					°C

Notes :

Both Bonding and Chip structure are available.

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RATINGS AND CHARACTERISTIC CURVES

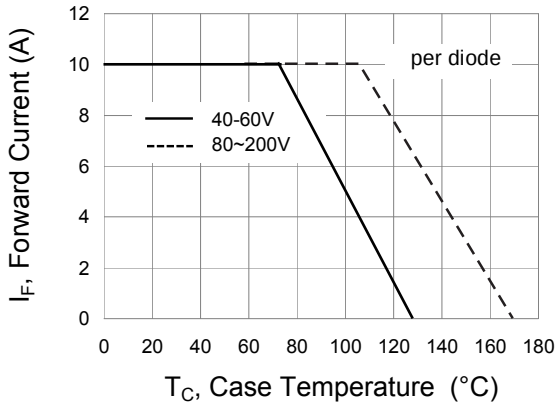

Fig.1 Forward Current Derating Curve

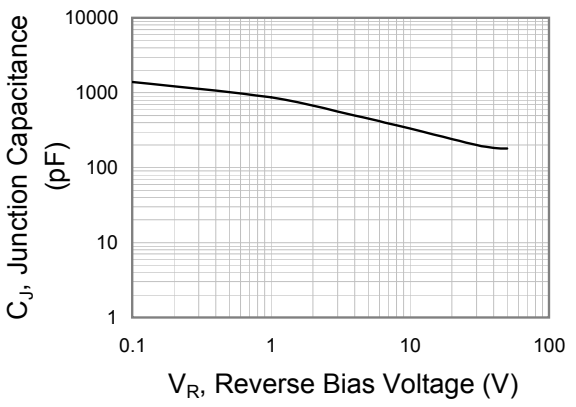

Fig.2 Typical Junction Capacitance

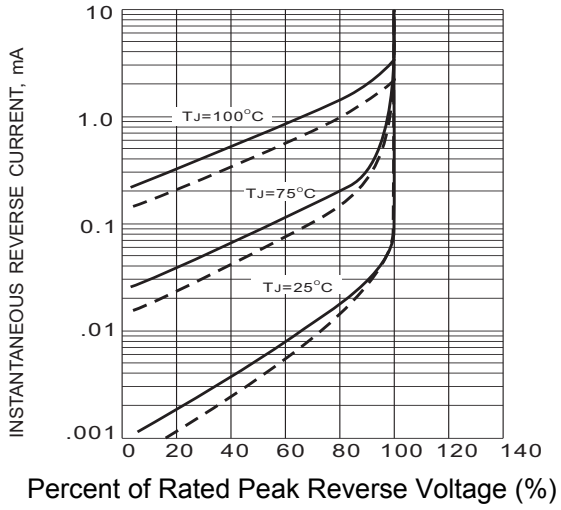

Fig.3 Typical Reverse Characteristics

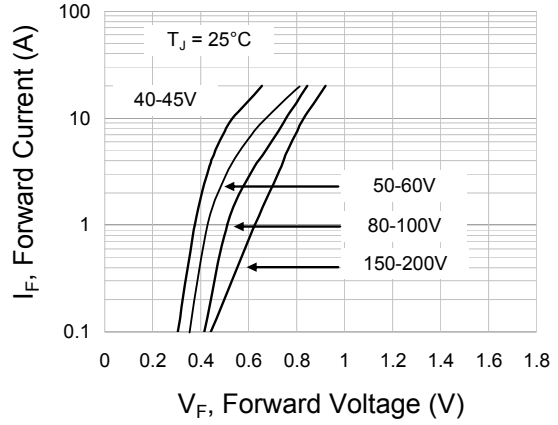

Fig.4 Typical Forward Characteristics

The cruve graph is for reference only, can't be the basis for judgment