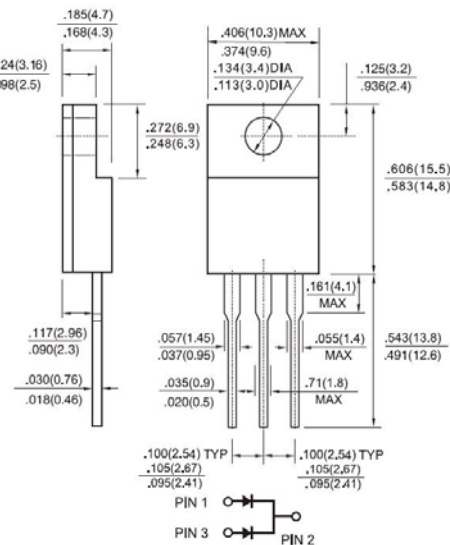




MBRF20H100CT - MBRF20H200CT **10.0AMPS Isolated Schottky Barrier Rectifiers** **ITO-220AB**

Features

- UL Recognized File # E-326243
- Plastic material used carriers Underwriters Laboratory Classification 94V-0
- Metal silicon junction, majority carrier conductor
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High surge capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- Guard-ring for overvoltage protection
- High temperature soldering guaranteed: 260°C/10 seconds/.25", (6.35mm) from case
- Green compound with suffix "G" on packing code & prefix "G" on datecode



Mechanical Data

- Case: ITO-220AB molded plastic body
- Terminals: Pure tin plated, lead free, solderable per MIL-STD-750, Method 2026
- Polarity: As marked
- Mounting position: Any
- Mounting torque: 5 in. - lbs, max
- Weight: 1.75 grams

Dimensions in inches and (millimeters)

Marking Diagram



MBRF20HXXCT	= Specific Device Code
G	= Green Compound
Y	= Year
WW	= Work Week

Maximum Ratings and Electrical Characteristics

Rating 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%

Type Number	Symbol	MBRF 20H100CT	MBRF 20H150CT	MBRF 20H200CT	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	100	150	200	V
Maximum RMS Voltage	V _{RMS}	70	105	140	V
Maximum DC Blocking Voltage	V _{DC}	100	150	200	V
Maximum Average Forward Rectified Current at T _c =133℃	I _{F(AV)}	20			A
Peak Repetitive Surge Current (Rated V _R , Square Wave, 20KHz) at Tc=133℃	I _{FRM}	20			A
Peak Forward Surge Current, 8.3 ms Single Half Sine- wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	150			A
Peak Repetitive Reverse Surge Current (Note 1)	I _{RRM}	1		0.5	A
Maximum Instantaneous Forward Voltage (Note 2) IF=10A, T _A =25℃ IF=10A, T _A =125℃ IF=20A, T _A =25℃ IF=20A, T _A =125℃	V _F	0.85 0.75 0.95 0.85	0.88 0.75 0.97 0.85		V
Maximum Reverse Current @ Rated V _R T _A =25 ℃ 					

Note 1: 2.0uS Pulse Width, f=1.0KHz

Note 2: Pulse Test : 300uS Pulse Width, 1% Duty Cycle

Note 3: Clip Mounting (on case), where lead does not overlap heatsink with 0.11" offset

Note 4: Clip Mounting (on case), where lead do overlap heatsink.

Note 5: Screw mounting with 4-40 screw, where washer diameter is $\leq 4.9mm$ (0.19")

RATINGS AND CHARACTERISTIC CURVES (MBRF20H100CT THRU MBRF20H200CT)

FIG.1 FORWARD CURRENT DERATING CURVE

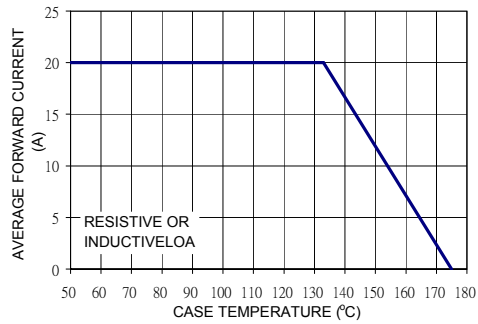


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

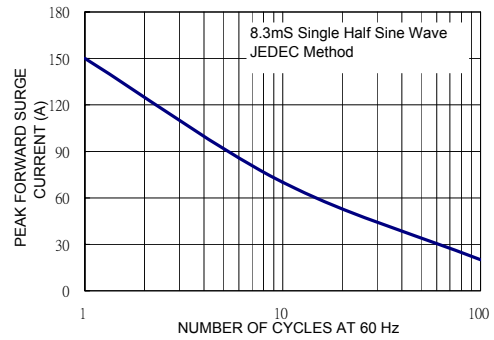


FIG. 3 TYPICAL FORWARD CHARACTERISTICS

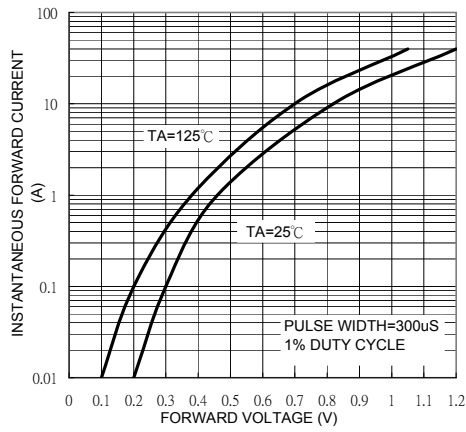


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

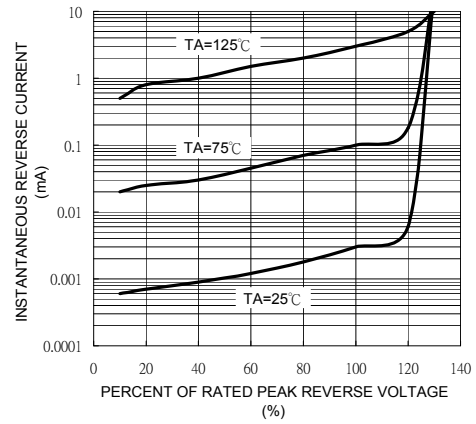


FIG. 5 TYPICAL JUNCTION CAPACITANCE

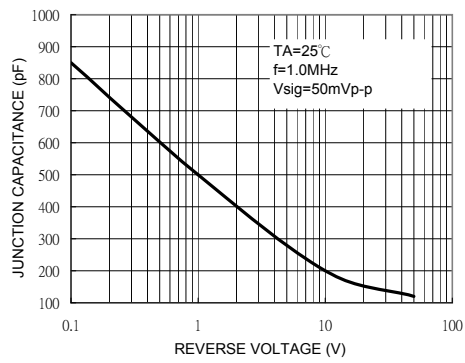


FIG. 6 TYPICAL TRANSIENT THERMAL IMPEDANCE

