



MBRF10150CT THRU MBRF10200CT

SCHOTTKY BARRIER RECTIFIER

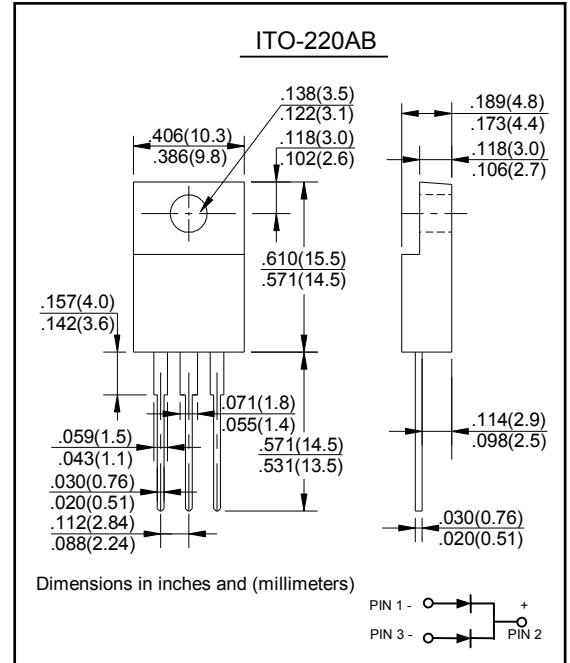
Reverse Voltage - 150 to 200 Volts Forward Current - 10.0 Ampere

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Dual rectifier construction, positive center tap
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- Guardring for overvoltage protection
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

MECHANICAL DATA

- Case: JEDEC ITO-220AB molded plastic body
- Terminals: Plated leads, solderable per MIL-STD-750, Method 2026
- High temperature soldering guaranteed:
250°C/10 seconds, 0.25" (6.35mm) from case
- Polarity: As marked
- Mounting Position: Any
- Mounting Torque: 10 in-lbs maximum
- Weight: 0.08 ounce, 2.24 grams



Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Chaacteristic	Symbol	MBRF10150CT	MBRF10200CT	Unit
Peak Repetitive Reverse Voltage	V_{RRM}			
Working Peak Reverse Voltage	V_{RWM}	150	200	V
DC Blocking Voltage	V_R			
RMS Reverse Voltage	$V_{R(RMS)}$	105	140	V
Average Rectified Output Current @ $T_C = 95^\circ\text{C}$	I_O	10		A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150		A
Forward Voltage @ $I_F = 5.0\text{A}$	V_{FM}	0.92		V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$	I_{RM}	0.5		mA
At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$		50		
Typical Junction Capacitance (Note 1)	C_j	700		pF
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150		$^\circ\text{C}$

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



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RATINGS AND CHARACTERISTIC CURVES

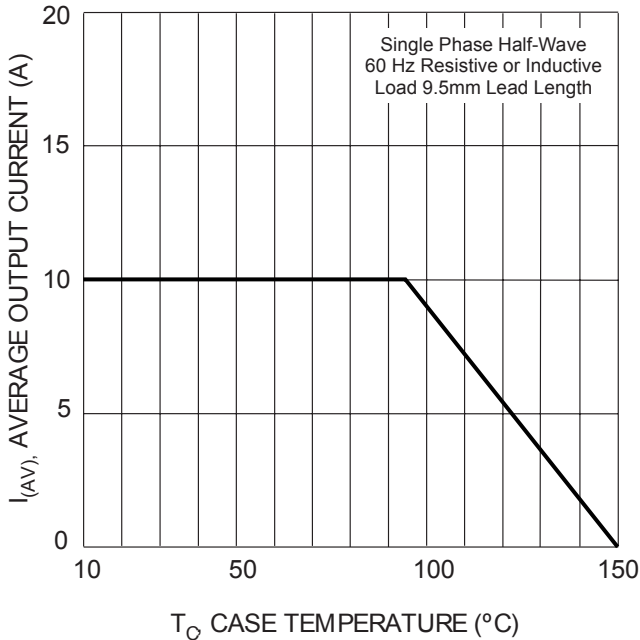


Fig. 1 Forward Current Derating Curve

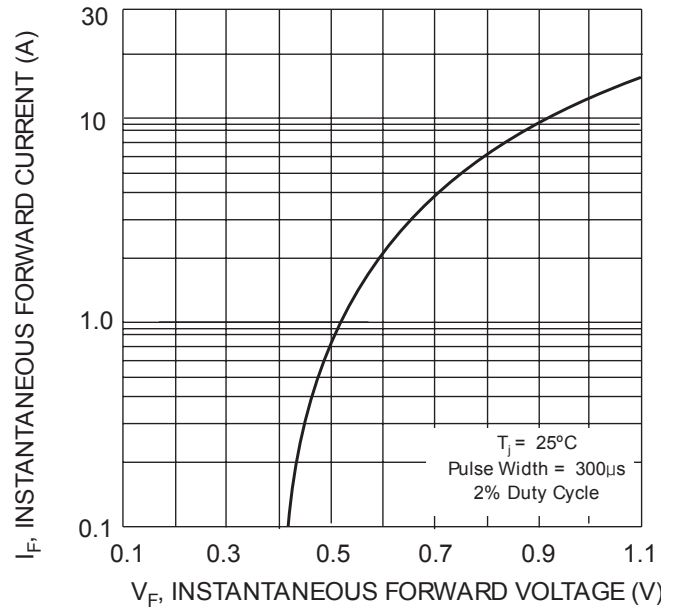


Fig. 2 Typical Forward Voltage Characteristics

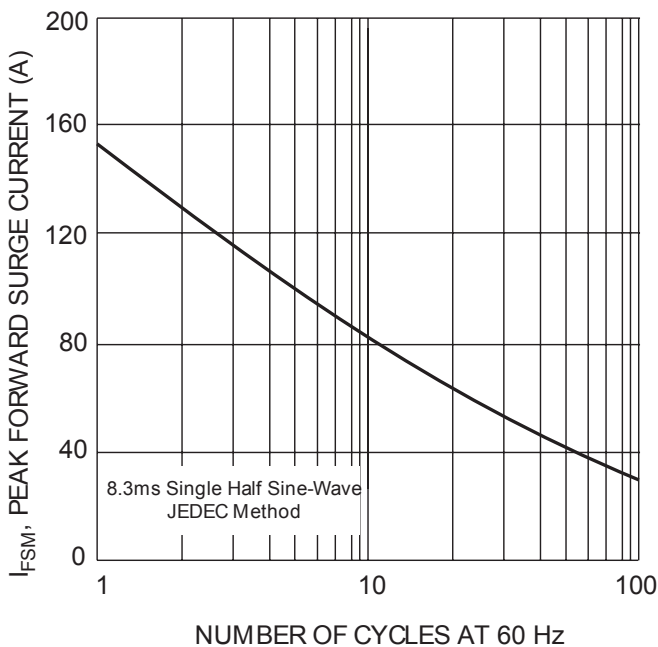


Fig. 3 Peak Forward Surge Current

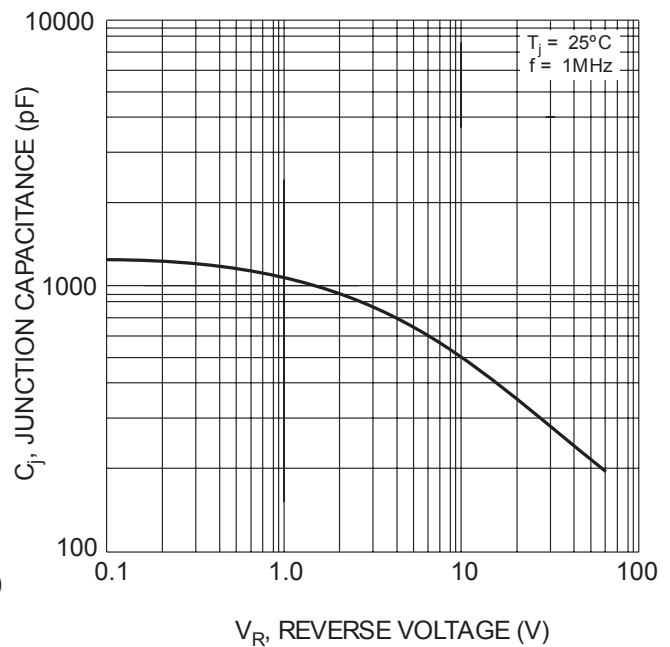


Fig. 4 Typical Junction Capacitance