MBR40150PT THRU MBR40200PT

SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 150 to 200 Volts Forward Current - 40.0 Ampere

FEATURES

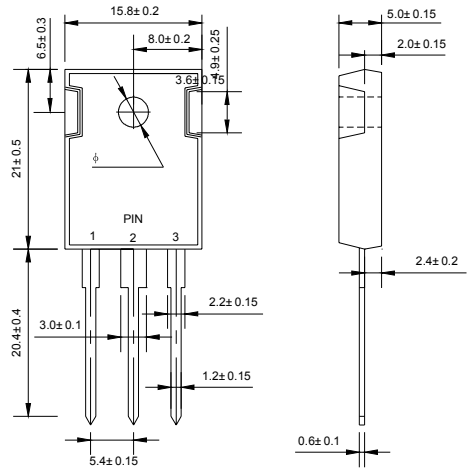
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Dual rectifier construction, positive center tap
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- Guardring for overvoltage protection
- For use in low voltage, high frequency inverters,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

MECHANICAL DATA

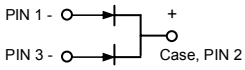
- Case: TO-3P, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-750, Method 2026
- Polarity: See Diagram
- Weight: 5.6 grams (approx.)
- Mounting Position: Any
- Mounting Torque: 11.5 cm-kg (10 in-lbs) Max.

RoHS Compliant

TO-3P



Dimensions in millimeters



Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

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

Characteristic	Symbol	MBRF40150PT	MBRF40200T	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	150	200	V
RMS Reverse Voltage	$V_{R(RMS)}$	105	140	V
Average Rectified Output Current @T_C = 105°C	I_O	40		A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	350		A
Forward Voltage @I_F = 40A	V_{FM}	0.92		V
Peak Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 125°C	I_{RM}	0.5 20		mA
Typical Junction Capacitance (Note 1)	C_j	320		pF
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +175		°C

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
2. Thermal resistance junction to case mounted on heatsink.

MBR40150PT THRU MBR40200PT

RATINGS AND CHARACTERISTIC CURVES

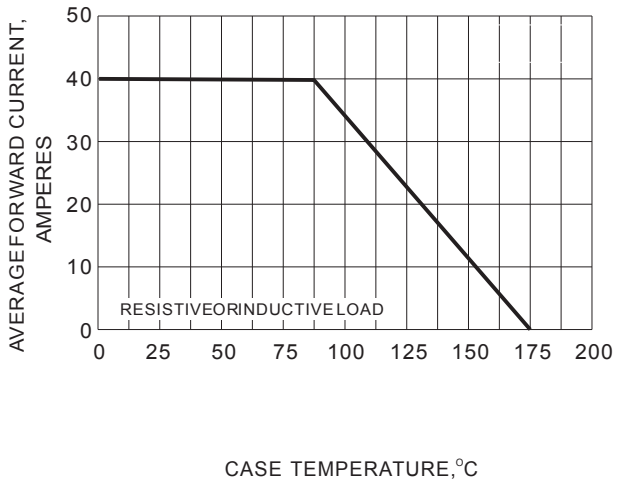


Fig.1-FORWARD CURRENT DERATING CURVE

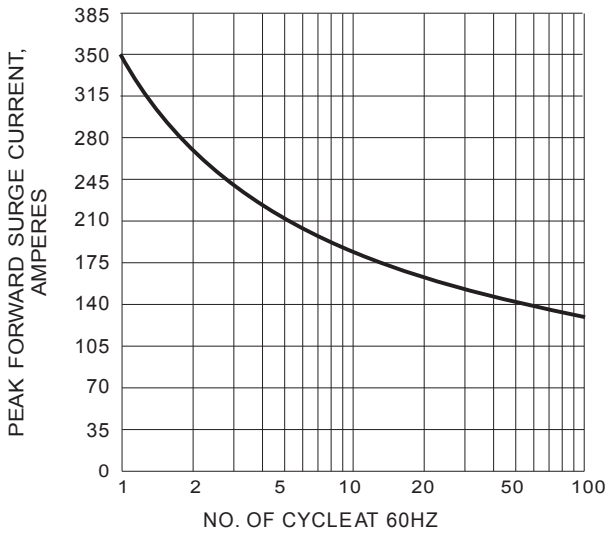


Fig.2-MAXMUM NON-REPETITIVE SURGE CURRENT

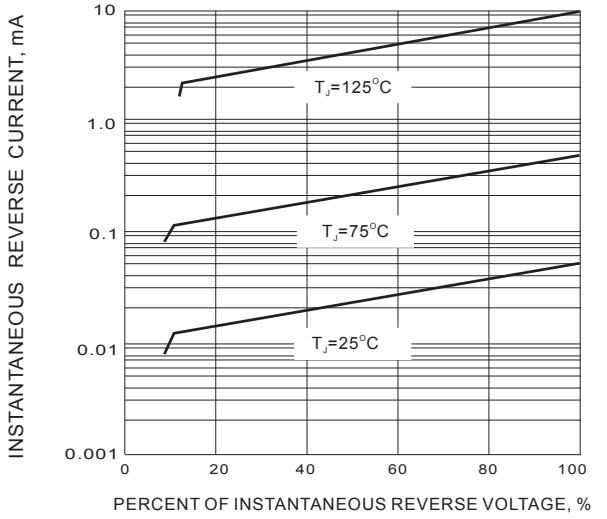


Fig.3-TYPICAL REVERSE CHARACTERISTIC

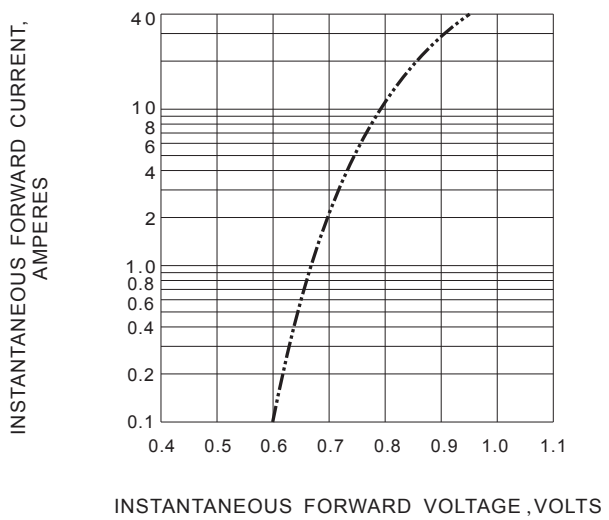


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC