



SHENZHEN HAOLIN ELECTRONICS TECHNOLOGY CO., LTD

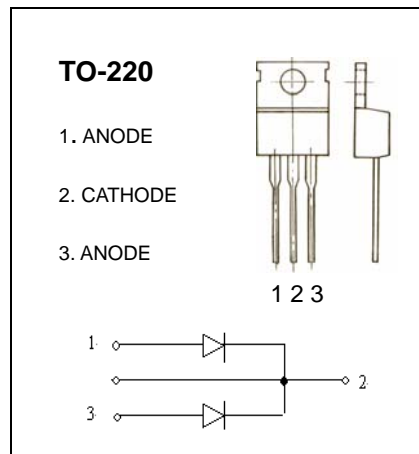
TO-220 Plastic-Encapsulate Transistors

MBR2070-20100

SCHOTTKY BARRIER RECTIFIER

FEATURES

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- Low Power Loss, High Efficiency
- High Surge Capability
- High Current Capability and Low Forward Voltage Drop
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications



ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Characteristic	Symbol	MBR 2070	MBR 2080	MBR 2090	MBR 20100	Unit
Peak Repetitive Reverse Voltage	V_{RRM}					
Working Peak Reverse Voltage	V_{RWM}	70	80	90	100	V
DC Blocking Voltage	V_R					
RMS Reverse Voltage	$V_{R(RMS)}$	49	56	63	70	V
Average Rectified Output Current (Note 1) @ Tc=125°C	I_O	20				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 Drop @ I _F =10A, T _J =125°C @ I _F =10A, T _J =25°C @ I _F =20A, T _J =125°C @ I _F =20A, T _J =25°C	V_{FM}	0.75 0.85 0.85 0.95				V
Peak Reverse Current @ T _J =25°C at Rated DC Blocking Voltage @ T _J =125°C	I_{RM}	0.15 150				mA
Typical Junction Capacitance (Note 2)	C_j	1000				pF
Operating and Storage Temperature Range	T _j , T _{STG}	-65 to +150				°C

Notes: 1. Thermal resistance junction to case mounted heat sink.

2. Measured at 1MHz and applied reverse voltage of 4.0V DC.

Typical Characteristics

MBR2070-MBR20100

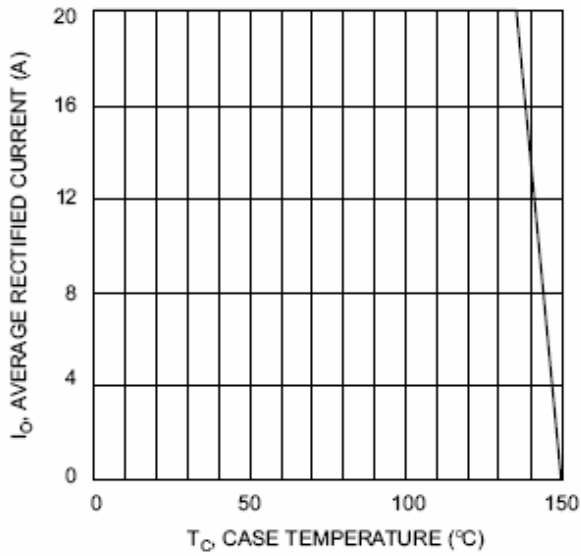


Fig. 1 Fwd Current Derating Curve

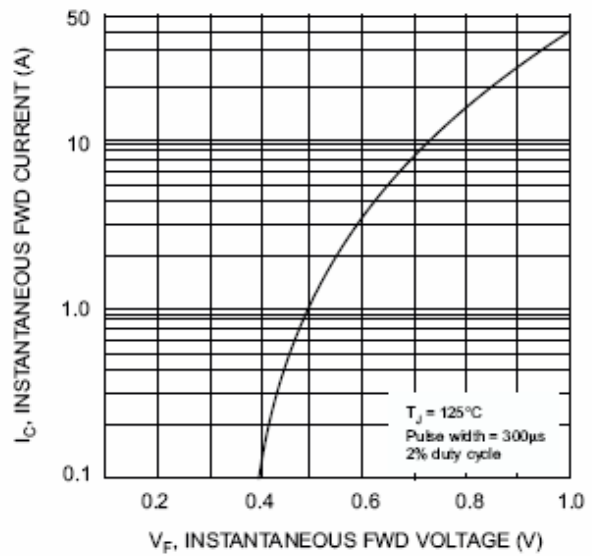


Fig. 2 Typical Forward Characteristics

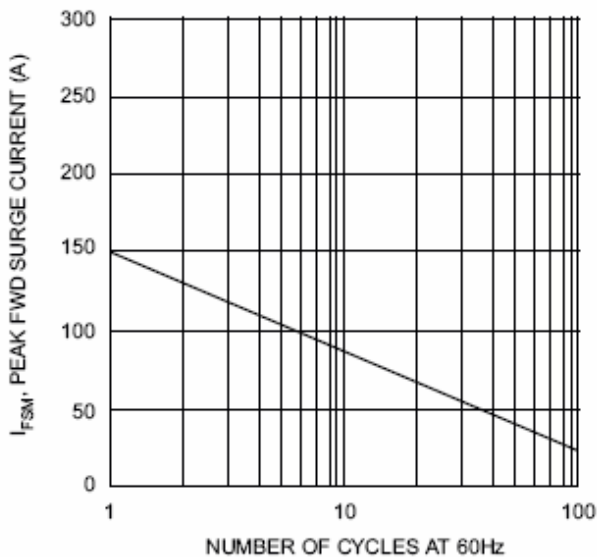


Fig. 3 Max Non-Repetitive Surge Current

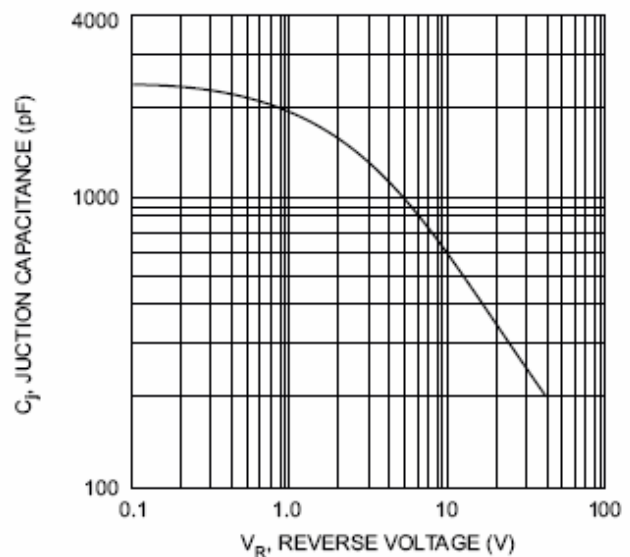


Fig. 4 Typical Junction Capacitance