CAN SHENG

深圳灿升实业发展有限公司

肖 特 基 三 极 管

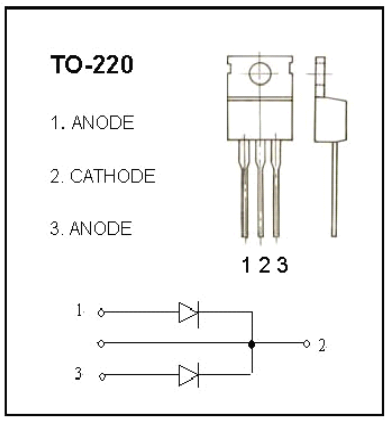
MBR2030CT-2060CT

MBR2030CT-MBR2060CT

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℃ unless otherwise specified)

Characteristic	Symbol	MBR 2030	MBR 2035	MBR 2040	MBR 2045	MBR 2050	MBR 2060	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	30	35	40	45	50	60	V
RMS Reverse Voltage	$V_{R(RMS)}$	21	24.5	28	31.5	35	42	V
Average Rectified Output Current (Note 1) @ T_C=125℃	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=25℃ @ I_F=10A, T_j=125℃	V_{FM}	0.70 0.57				0.80 0.70		V
Peak Reverse Current @ T_j= 25℃ at Rated DC Blocking Voltage @ T_j=125℃	I_{RM}	0.1 15						mA
Typical Junction Capacitance (Note 2)	C_j	650						pF
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150						℃

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

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

Typical Characteristics

MBR2030CT-MBR2060CT

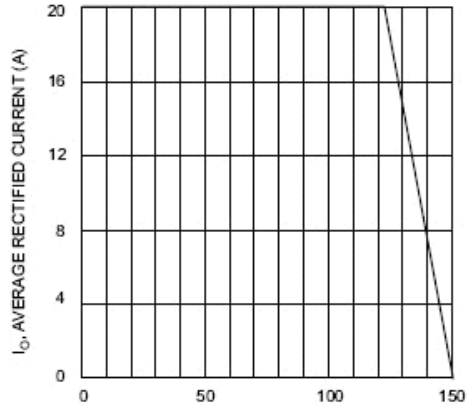


Fig. 1 Forward Current Derating Curve

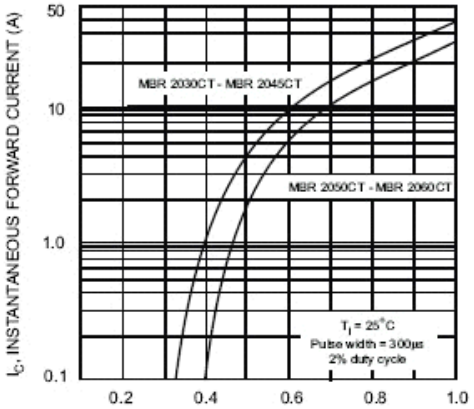


Fig. 2 Typical Forward Characteristics

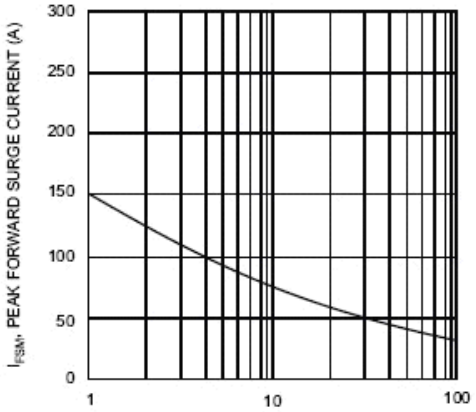


Fig. 3 Max Non-Repetitive Surge Current

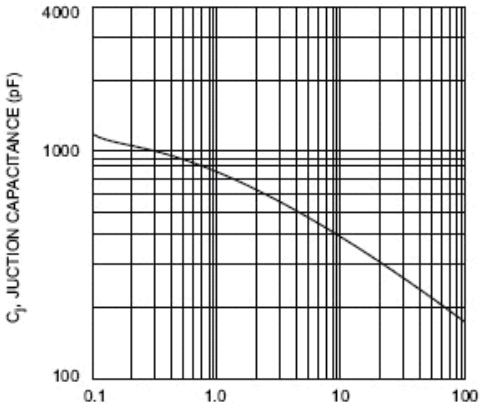


Fig. 4 Typical Junction Capacitance

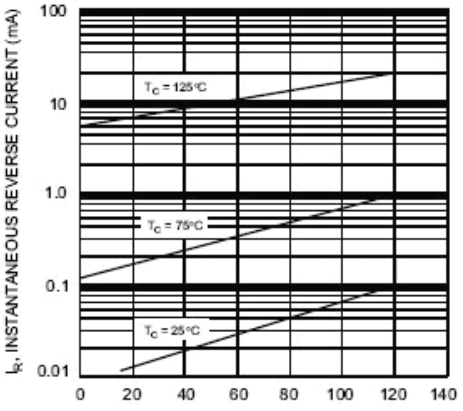


Fig. 5 Typical Reverse Characteristics