MBR10150,200

SCHOTTKY BARRIER RECTIFIER

TO-220A

1.CATHODE

2.ANODE

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

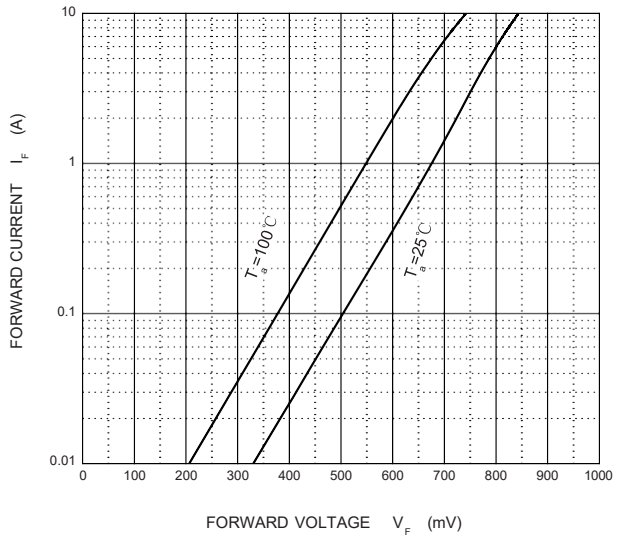
MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value		Unit
		MBR10150	MBR10200	
V_{RRM}	Peak repetitive reverse voltage	150	200	V
V_{RWM}	Working peak reverse voltage			
V_R	DC blocking voltage			
$V_{R(RMS)}$	RMS reverse voltage	105	140	V
I_O	Average rectified output current	10		A
I_{FSM}	Non-Repetitive peak forward surge current 8.3ms half sine wave	150		A
P_D	Power dissipation	2		W
$R_{\Theta JA}$	Thermal resistance from junction to ambient	50		℃/W
T_j	Operating Junction Temperature Range	-40 ~ +125		℃
T_{stg}	Storage Temperature Range	-55 ~ +150		℃

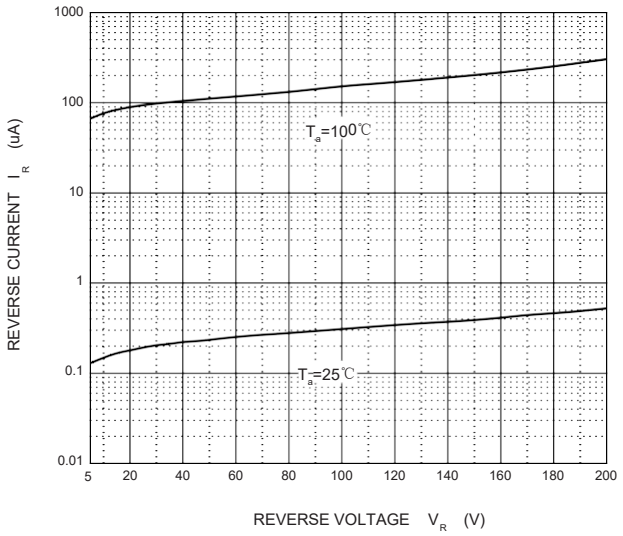
ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

Parameter	Symbol	Device	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	MBR10150	I_R=0.1mA	150			V
		MBR10200		200			
Reverse current	I_R	MBR10150	V_R=150V			9	μA
		MBR10200	V_R=200V				
Forward voltage	V_F	MBR10150	I_F=10A			1	V
		MBR10200				1.05	

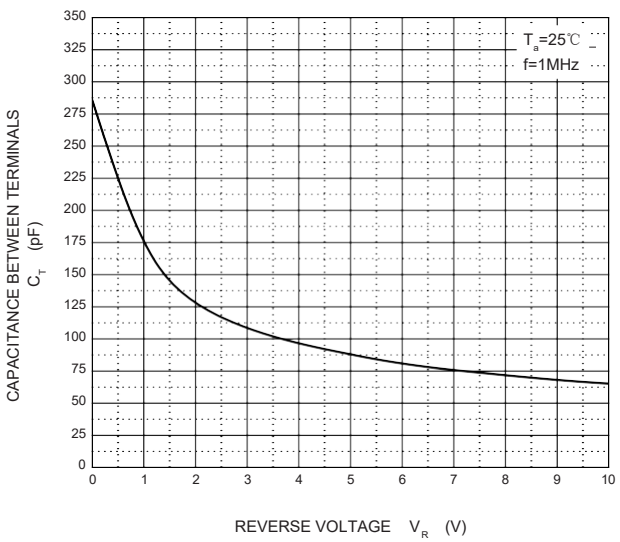
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power Derating Curve