MBR20150 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)

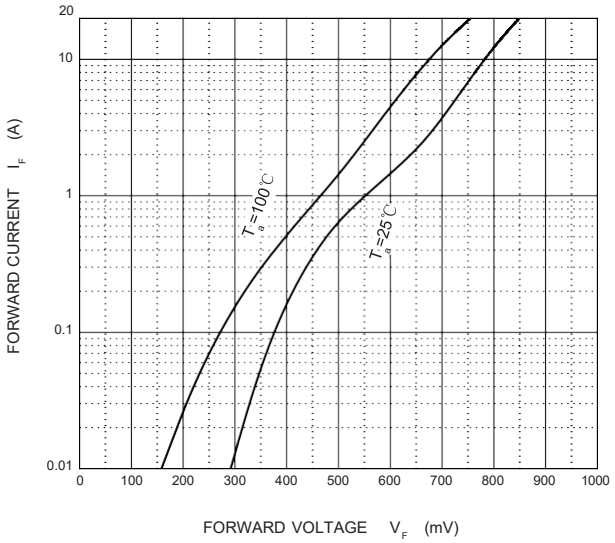
Symbol	Parameter	Value	Unit
V_{RRM}	Peak repetitive reverse voltage	150	V
V_{RWM}	Working peak reverse voltage		
V_R	DC blocking voltage		
$V_{R(RMS)}$	RMS reverse voltage	105	V
I_O	Average rectified output current	20	A
I_{FSM}	Non-Repetitive peak forward surge current 8.3ms half sine wave	200	A
P_D	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)

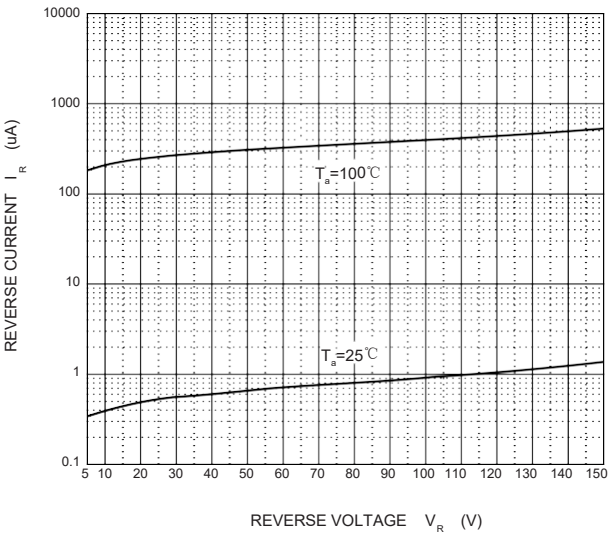
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	I_R=1mA	150			V
Reverse current	I_R	V_R=150V			0.1	mA
Forward voltage	V_{F1}	I_F=10A			0.9	V
	V_{F2}*	I_F=20A			1	V

*Pulse test: pulse width ≤300μs, duty cycle≤ 2.0%.

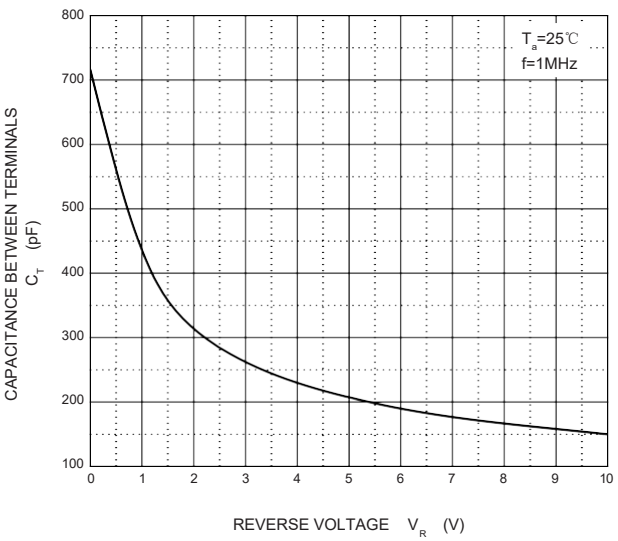
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power Derating Curve