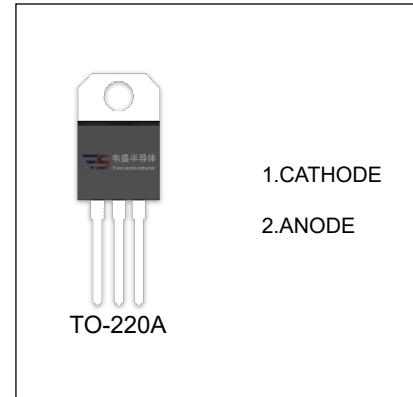


# **MBR1060,80,90,100**

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

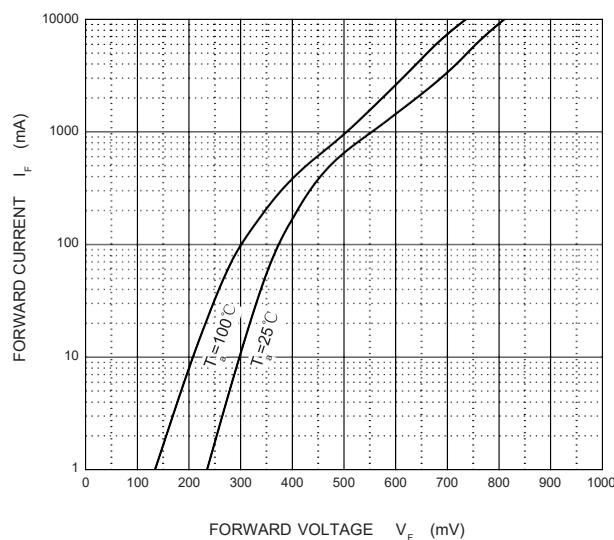
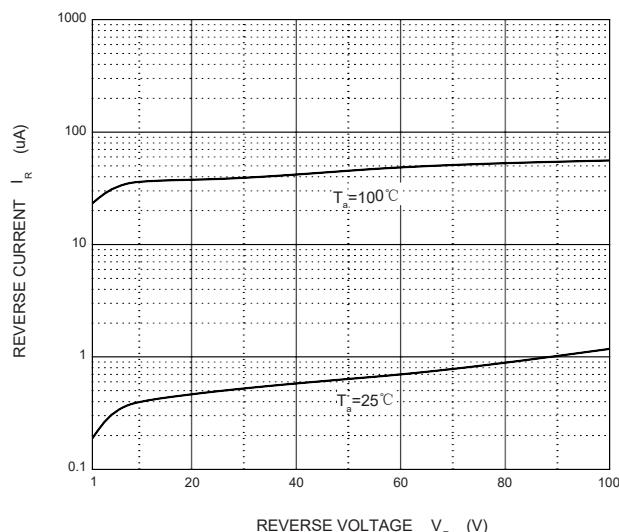
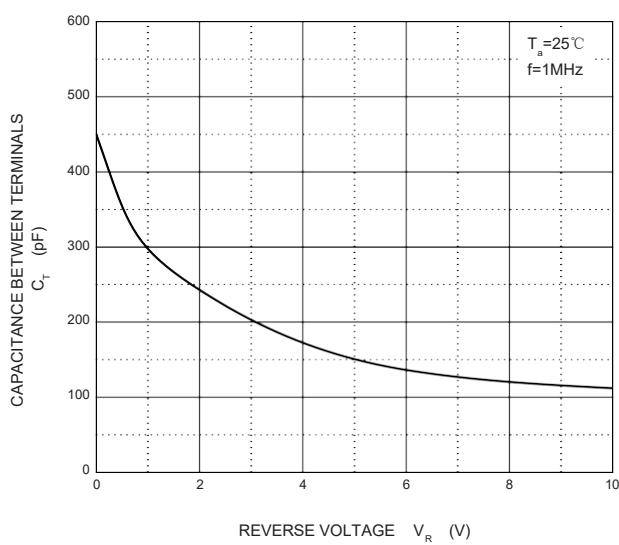


## **MAXIMUM RATINGS ( $T_a=25^\circ\text{C}$ unless otherwise noted )**

Symbol	Parameter	Value				Unit
		MBR1060	MBR1080	MBR1090	MBR10100	
$V_{RRM}$	Peak repetitive reverse voltage					
$V_{RWM}$	Working peak reverse voltage	60	80	90	100	V
$V_R$	DC blocking voltage					
$V_{R(RMS)}$	RMS reverse voltage	42	56	63	70	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
$R_{QJA}$	Thermal resistance from junction to ambient			50		°C/W
$T_j$	Operating Junction Temperature Range			-40 ~ +125		°C
$T_{stg}$	Storage Temperature Range			-55 ~ +150		°C

## **ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$ unless otherwise specified )**

Parameter	Symbol	Device	Test conditions	Min	Typ	Max	Unit
<b>Reverse voltage</b>	$V_{(BR)}$	MBR1060	$I_R=1\text{mA}$	60			V
		MBR1080		80			
		MBR1090		90			
		MBR10100		100			
<b>Reverse current</b>	$I_R$	MBR1060	$V_R=60\text{V}$		0.1	mA	
		MBR1080	$V_R=80\text{V}$				
		MBR1090	$V_R=90\text{V}$				
		MBR10100	$V_R=100\text{V}$				
<b>Forward voltage</b>	$V_F$	MBR1060	$I_F=10\text{A}$		0.8	V	
		MBR1080-100			0.84	V	

**Forward Characteristics**

**Reverse Characteristics**

**Capacitance Characteristics**

**Power Derating Curve**
