

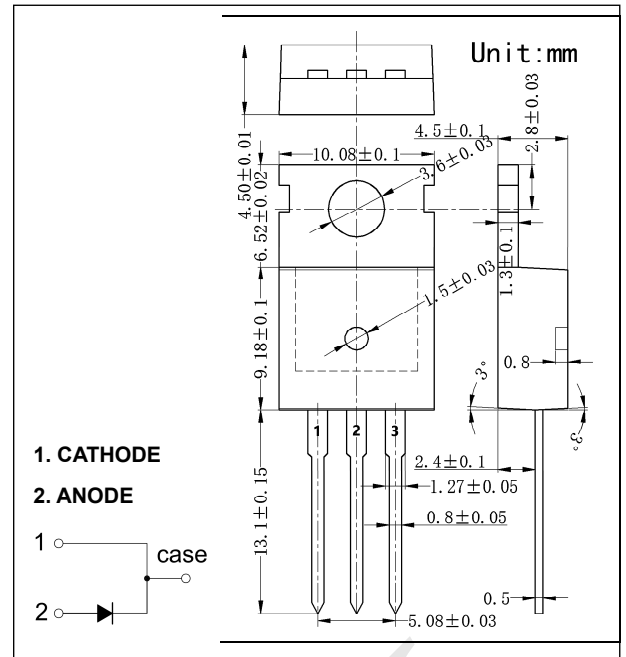
TO-220 Plastic-Encapsulate Diodes

MBR10200

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)

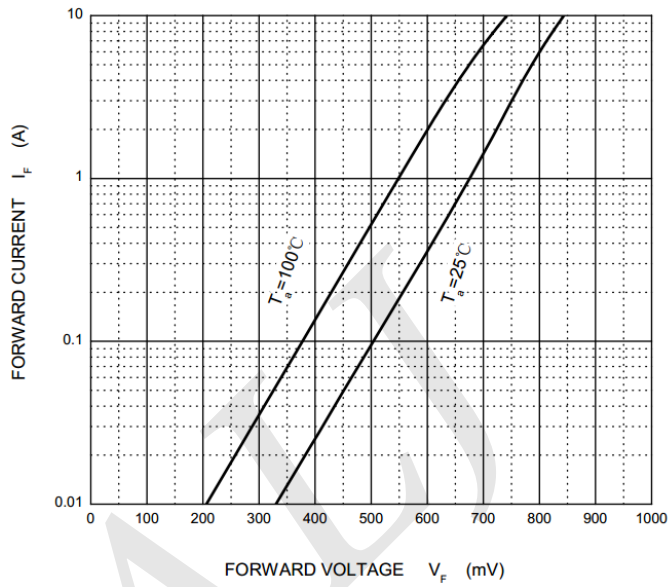
Symbol	Parameter	Value	Unit
V_{RRM}	Peak repetitive reverse voltage	200	V
V_{RWM}	Working peak reverse voltage		
V_R	DC blocking voltage		
$V_{R(RMS)}$	RMS reverse voltage	140	V
I_o	Average rectified output current@ $T_C=100^\circ\text{C}$	10	A
I_{FSM}	Non-Repetitive peak forward surge current 8.3ms half sine wave	150	A
P_D	Power dissipation	2	W
$R_{\theta JA}$	Thermal resistance from junction to ambient	50	$^\circ\text{C/W}$
T_j	Junction temperature	125	$^\circ\text{C}$
T_{stg}	Storage temperature	-55~+150	$^\circ\text{C}$

Electrical Characteristics ($T_a=25^\circ\text{C}$ unless otherwise specified)

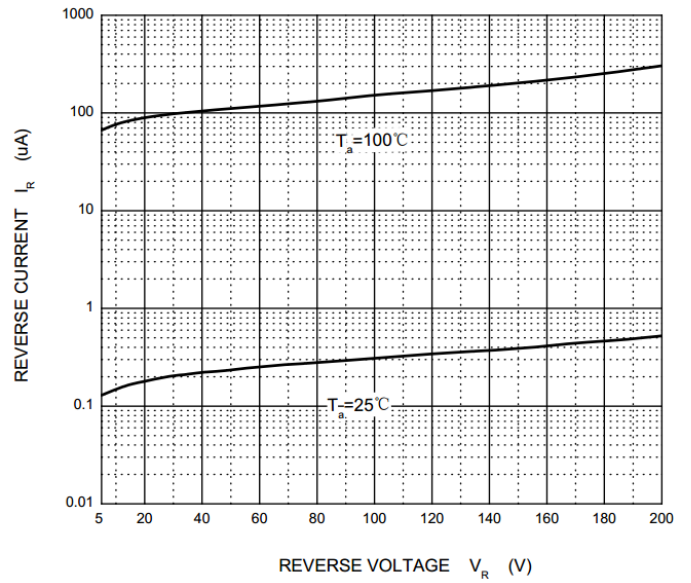
Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
$V_{(BR)}$	Reverse voltage	$I_R = 0.1\text{mA}$	200			V
I_R	Reverse current	$V_R = 200\text{V}$			9	μA
V_F	Forward voltage	$I_F = 10\text{A}$			1.05	V

Typical Characteristics

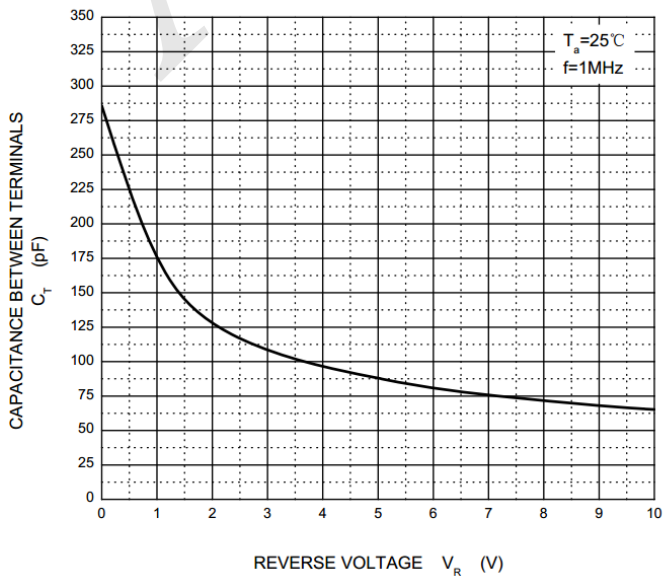
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

