

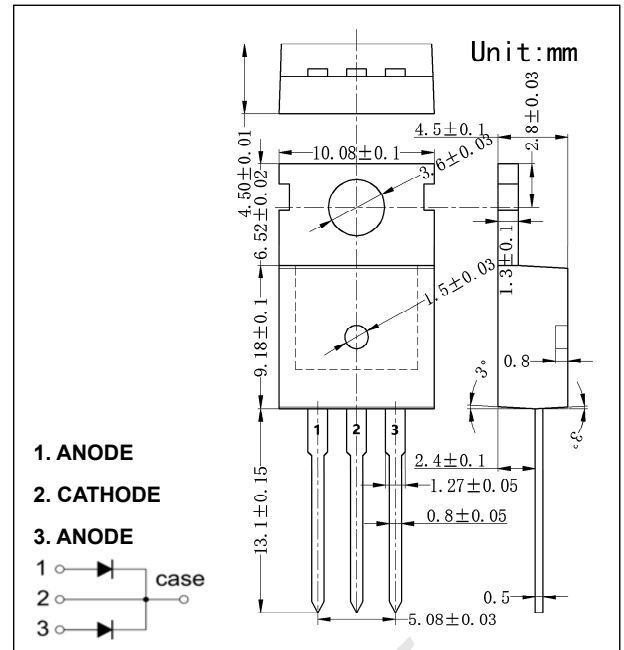
TO-220 Plastic-Encapsulate Diodes

MBR20200

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°C unless otherwise noted)

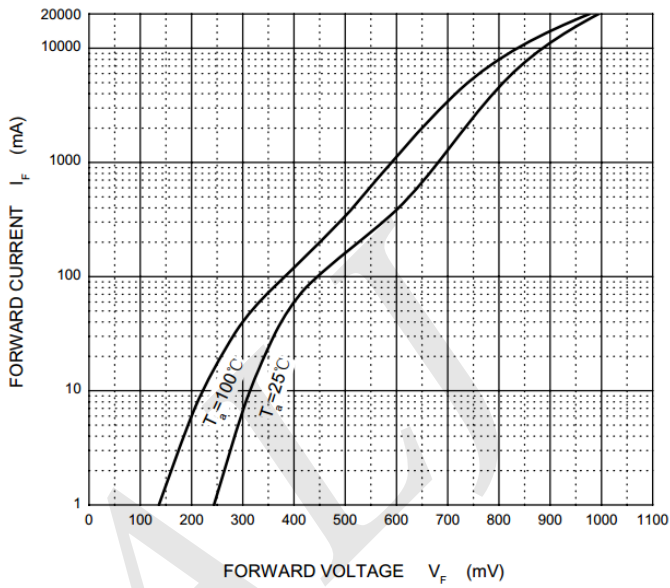
Symbol	Parameter	Value	Unit
V _{RRM}	Peak repetitive reverse voltage	200	V
V _{RWM}	Working peak reverse voltage		
V _R	DC blocking voltage		
V _{R(RMS)}	RMS reverse voltage	140	V
I _o	Average rectified output current@ T _C =100°C	20	A
I _{FSM}	Non-Repetitive peak forward surge current 8.3ms half sine wave	150	A
P _D	Power dissipation	2	W
R _{θJA}	Thermal resistance from junction to ambient	50	°C/W
T _j	Junction temperature	125	°C
T _{stg}	Storage temperature	-55~+150	°C

Electrical Characteristics (T_a=25°C unless otherwise specified)

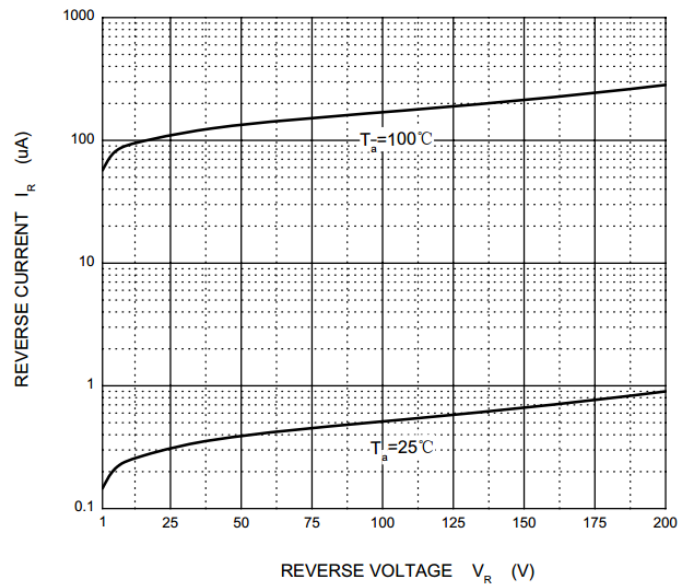
Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
V _(BR)	Reverse voltage	I _R = 1mA	200			V
I _R	Reverse current	V _R = 200V			100	μA
V _F	Forward voltage	I _F = 10A			1	V
		I _F = 20A			1.2	V
C _{tot}	Typical total capacitance	V _R =5, f=1MHz		500		pF

Typical Characteristics

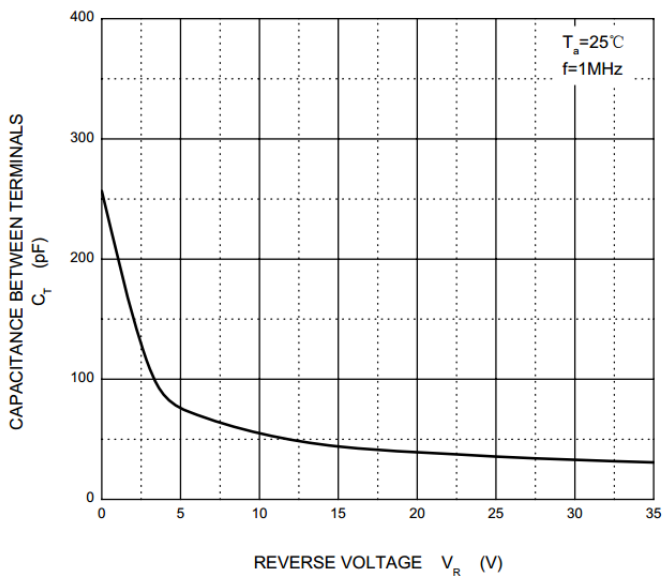
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

