

20.0A 200V Schottky Barrier Diode

Product Character

- Multilayer Metal -Silicon Potential Structure.
- Low Leakage Current.
- High Current Capability, High Efficiency.
- High Junction Temperature Capability.
- RoHS Product.
- Compliance with EU REACH.

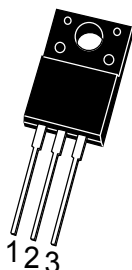
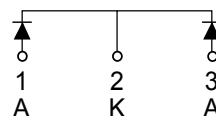
Primary Use

- Low Voltage High Frequency Switching Power Supply.
- Low Voltage High Frequency Invers Circuit.
- Low Voltage Continued Circuit and Protection Circuit.

Summarize

- MBR20H200FCT Device optimized for ultra-low forward voltage drop to maximize efficiency in Power Supply applications.

Equivalent Circuit



Package: ITO-220AB
MBR20H200FCT
MBR20H200FCT-HF
HF=Halogen Free

Absolute Maximum Ratings

Item	Symbol	Data	Unit
Maximal Inverted Repetitive Peak Voltage	V_{RRM}	200	V
Average Rectified Forward Current(Rated VR-20Khz Square Wave)-50% duty cycle	Per Device	20	A
	Per Diode	10	
Forward Peak Surge Current(Rated Load 8.3 Half Mssine Wave-According to JEDEC Method)	Per Diode	160	A
Operating Junction Temperature	T_J	-40~175	°C
Storage Temperature	T_{STG}	-40~175	°C
Typical Thermal Resistance(per leg)	Package=ITO-220AB	4	°C/W

Electricity Characteristics

Item	Test Condition	Value(min)	Value(typ)	Value(max)	Unit
V_B	$T_J=25^{\circ}\text{C}, I_R=1\text{mA}$	200	—	—	V
I_R	$T_J=25^{\circ}\text{C}, V_R=200\text{V}$	—	—	10	μA
	$T_J=125^{\circ}\text{C}, V_R=200\text{V}$	—	—	1	mA
V_F	$T_J=25^{\circ}\text{C}, I_F=10\text{A}$	—	0.85	0.9	V
	$T_J=125^{\circ}\text{C}, I_F=10\text{A}$	—	—	0.8	V
C_J	$T_J=25^{\circ}\text{C}, V_R=4\text{V}, f=1\text{MHz}$	—	115	—	pF



Characteristic Curves

Fig1. Typical Forward Current and Forward Voltage

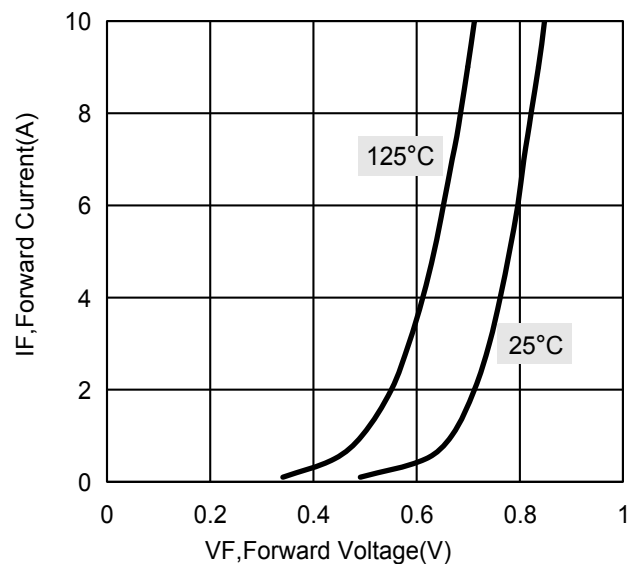


Fig2. Typical Current Derating Curve, Per Element

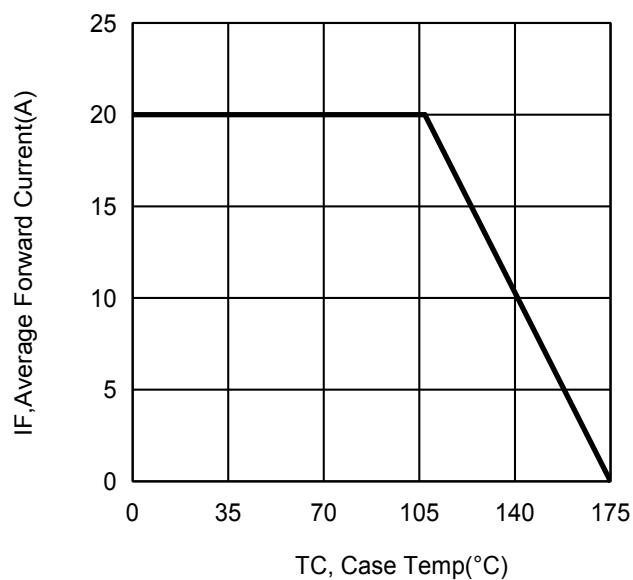


Fig3. Typical Reverse Current and Reverse Voltage

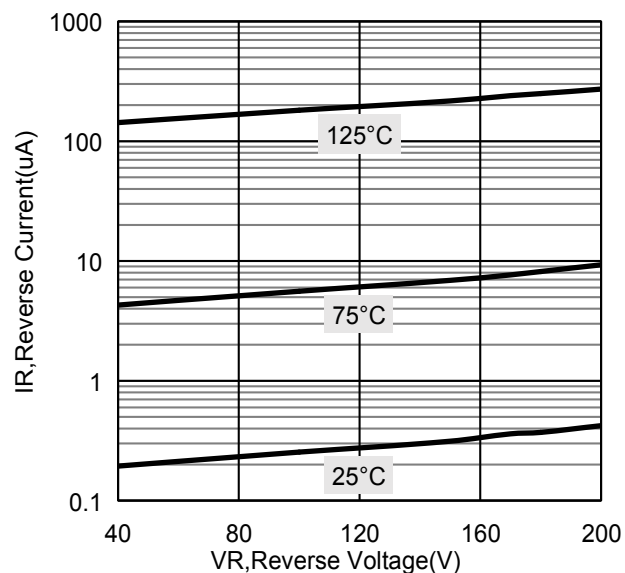
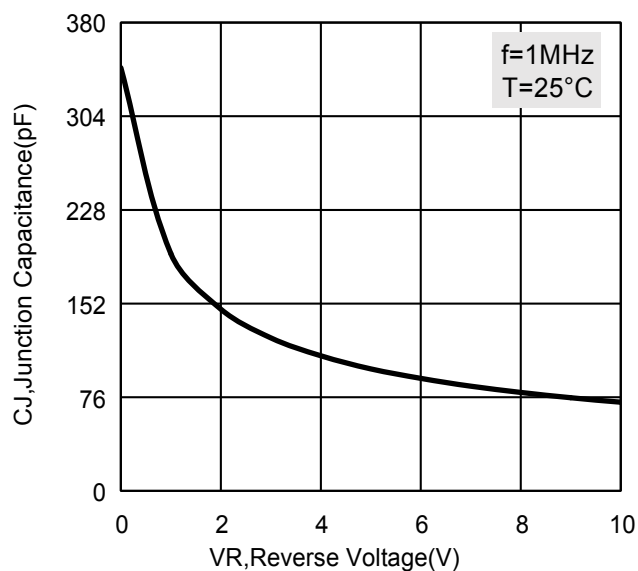
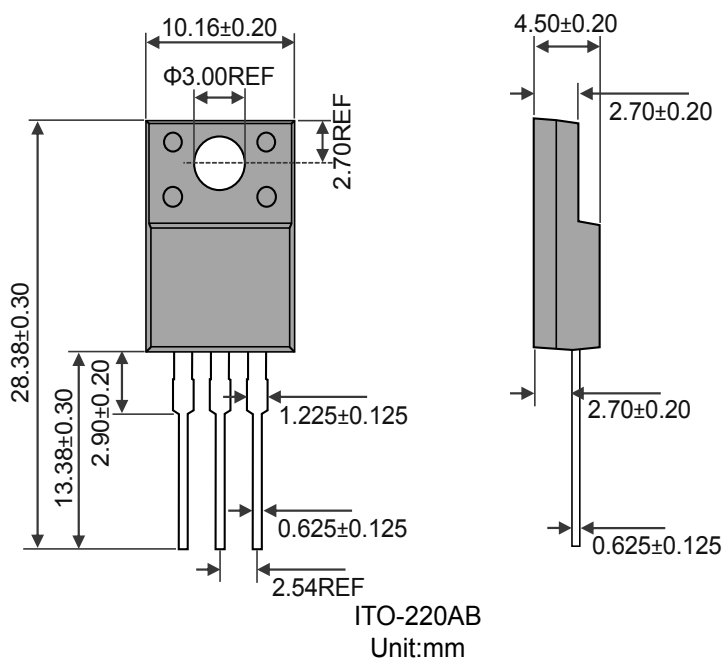


Fig4. Typical Junction Capacitance and Reverse Voltage

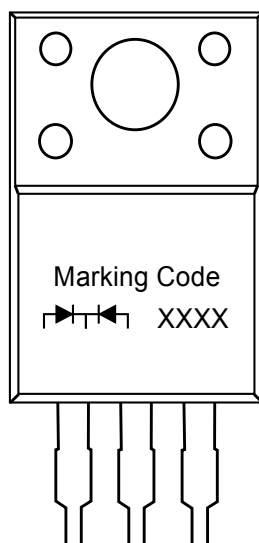




Package Outline Dimensions



Marking Information



"Marking Code"= The Following
"XXXX"= Date Code Marking

Marking Code	Part Number
MBR20H200F	MBR20H200FCT
	MBR20H200FCT-HF

Packing Information

Packaging	Part Number	Quantity(pcs)	Size(mm)
Tube	Tube	50	L534×W33×H7
	Inner Box	1000	L560×W150×H40
	Outer Box	5000	L570×W235×H175