

20.0A 150V Schottky Barrier Diode

Product Character

- Multilayer Metal -Silicon Potential Structure.
- Low Leakage Current.
- High Current Capability, High Efficiency.
- High Junction Temperature Capability.
- RoHs Product.

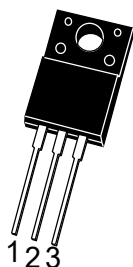
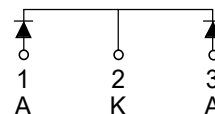
Primary Use

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

Summarize

- MBR20H150FCT Device optimized for ultra-low forward voltage drop to maximize efficiency in Power Supply applications.

Equivalent Circuit



Package: ITO-220AB

MBR20H150FCT

MBR20H150FCT-HF

HF=Halogen Free

Absolute Maximum Ratings

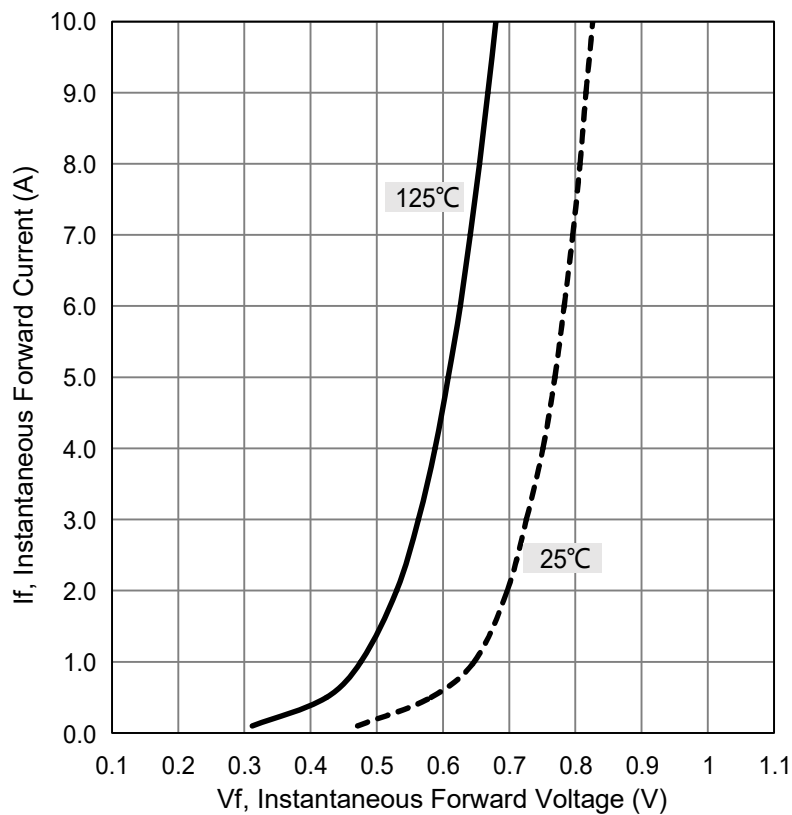
Item		Symbol	Data	Unit
Maximal Inverted Repetitive Peak Voltage		V_{RRM}	150	V
Average Rectified Forward Current(Rated VR-20Khz Square Wave)-50% duty cycle	Per Device	I_{FAV}	20	A
	Per Diode		10	
Forward Peak Surge Current(Rated Load 8.3 Half Mssine Wave-According to JEDEC Method)	Per Diode	I_{FSM}	190	A
Operating Junction Temperature		T_J	-40~175	°C
Storage Temperature		T_{STG}	-40~175	°C
Typical Thermal Resistance(per leg)	Package=ITO-220AB	$R_{\theta JC}$	4	°C/W

Electricity Characteristics

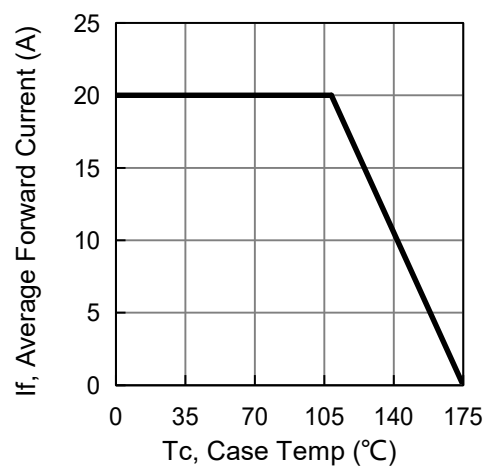
Item	Test Condition		Value(min)	Value(typ)	Value(max)	Unit
V_B	$T_J = 25^{\circ}C$	$I_R = 1mA$	150	—	—	V
I_R	$T_J = 25^{\circ}C$	$V_R = 150V$	—	—	0.01	mA
	$T_J = 125^{\circ}C$	$V_R = 150V$	—	—	1.00	mA
V_F	$T_J = 25^{\circ}C$	$I_F = 10A$	—	0.83	0.9	V
	$T_J = 125^{\circ}C$	$I_F = 10A$	—	—	0.8	V

Characteristic Curves

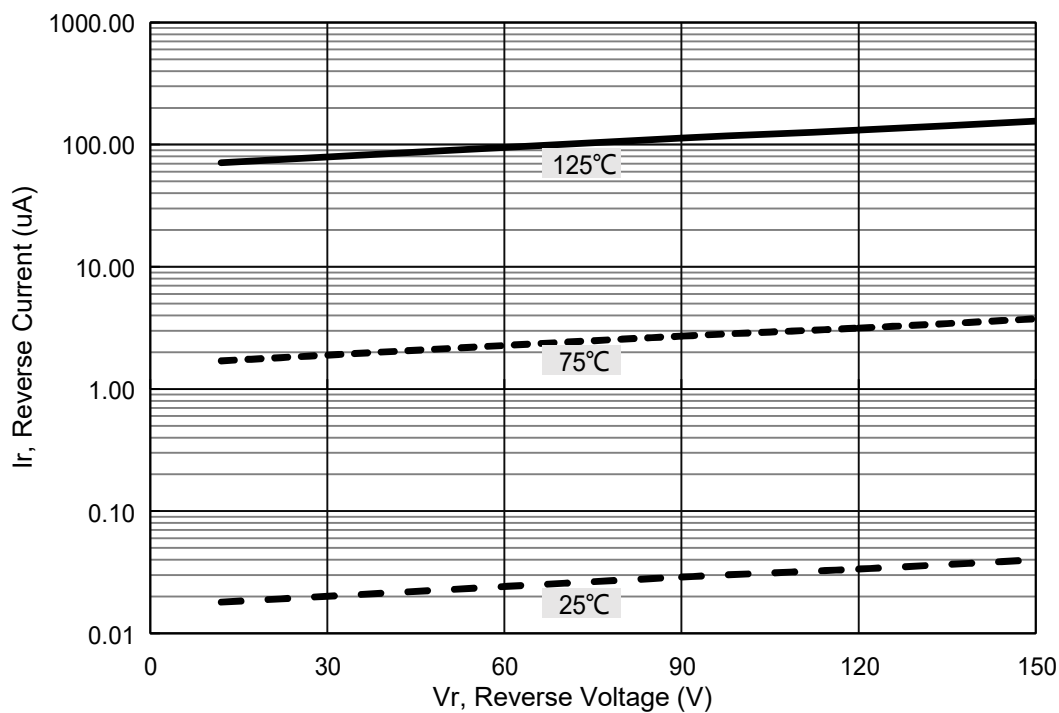
The forward voltage and forward current curve



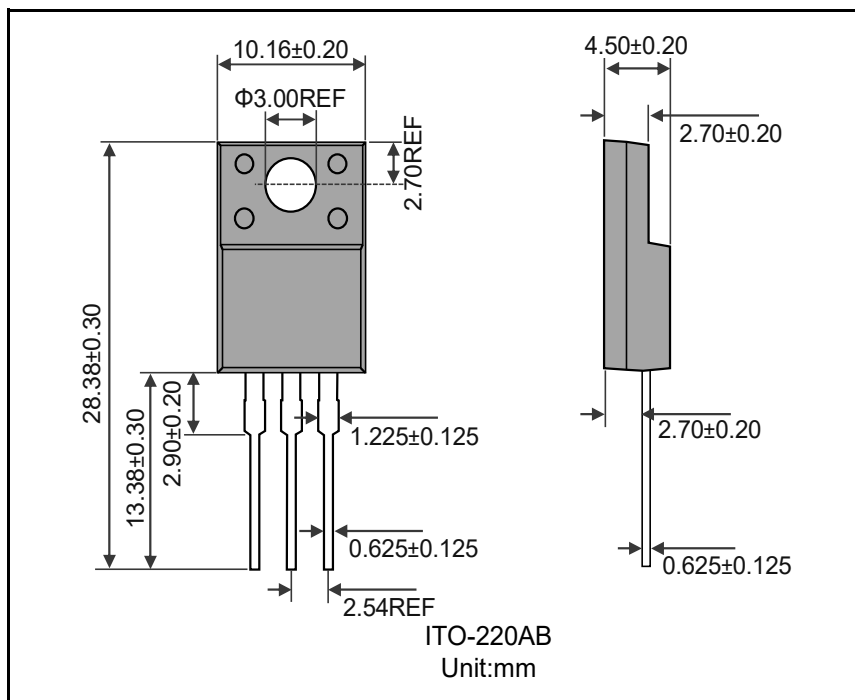
Current derating curve, per element



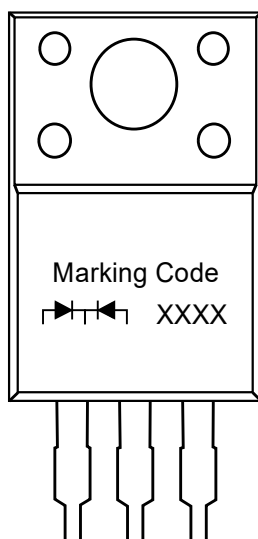
The reverse leak current and the reverse voltage (single-device) curve.



Package Outline Dimensions



Marking Information



Marking Code”= The Following
“XXXX”= Date Code Marking

Marking Code	Part Number
MBR20H150F	MBR20H150FCT
	MBR20H150FCT-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