

40.0A 100V Schottky Barrier Diode

Product Character

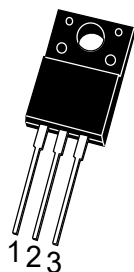
- Multilayer Metal -Silicon Potential Structure.
- Low Leakage Current.
- High Current Capability, High Efficiency.
- High Junction Temperature Capability.
- RoHs Product.

Primary Use

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

Summarize

- EBR40L100FCT Device optimized for ultra-low forward voltage drop to maximize efficiency in Power Supply applications.

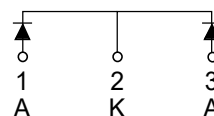


Package: ITO-220AB

EBR40L100FCT

EBR40L100FCT-HF

HF=Halogen Free



Absolute Maximum Ratings

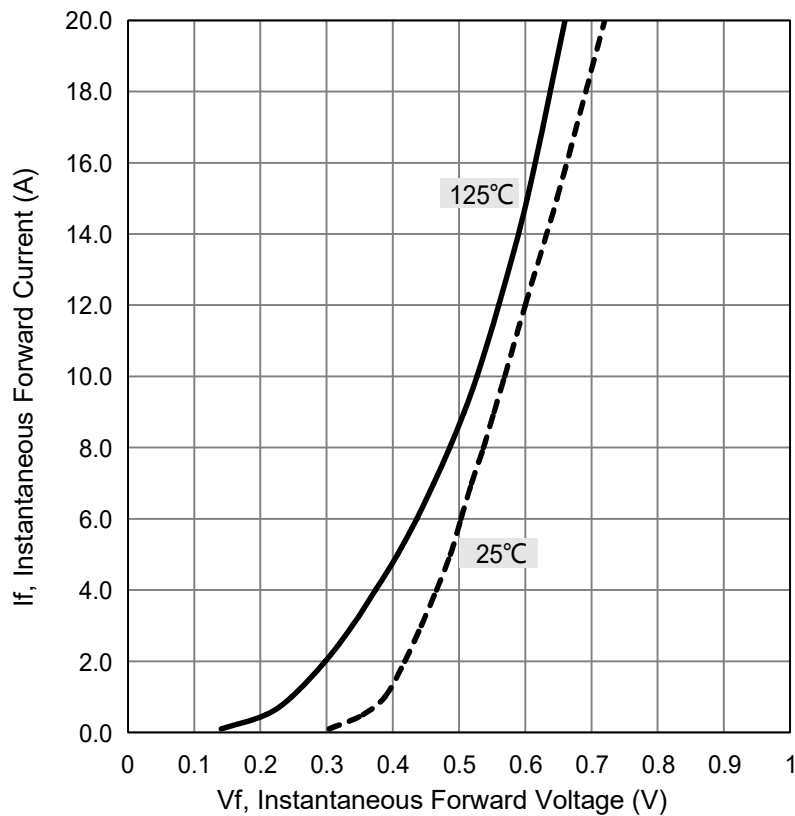
Item		Symbol	Data	Unit
Maximal Inverted Repetitive Peak Voltage		V_{RRM}	100	V
Average Rectified Forward Current(Rated VR-20Khz Square Wave)-50% duty cycle	Per Device	I_{FAV}	40	A
	Per Diode		20	
Forward Peak Surge Current(Rated Load 8.3 Half Mssine Wave-According to JEDEC Method)	Per Diode	I_{FSM}	270	A
Operating Junction Temperature		T_J	-40~150	°C
Storage Temperature		T_{STG}	-40~150	°C
Typical Thermal Resistance(per leg)	Package=ITO-220AB	$R_{\theta JC}$	4	°C/W

Electricity Characteristics

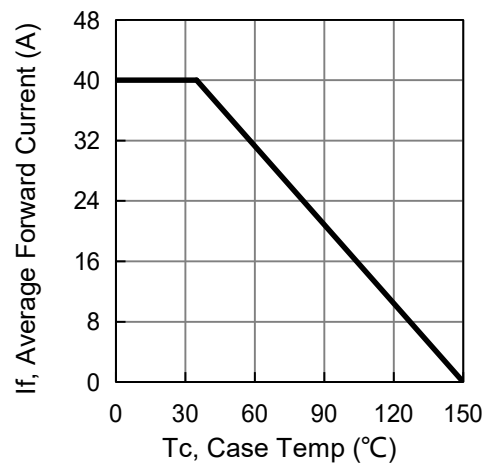
Item	Test Condition		Value(min)	Value(typ)	Value(max)	Unit
V_B	$T_J = 25^{\circ}C$	$IR = 1mA$	100	—	—	V
I_R	$T_J = 25^{\circ}C$	$VR = 100V$	—	—	0.03	mA
	$T_J = 100^{\circ}C$	$VR = 100V$	—	—	10.00	mA
V_F	$T_J = 25^{\circ}C$	$IF = 20A$	—	0.72	0.82	V
	$T_J = 125^{\circ}C$	$IF = 20A$	—	—	0.75	V

Characteristic Curves

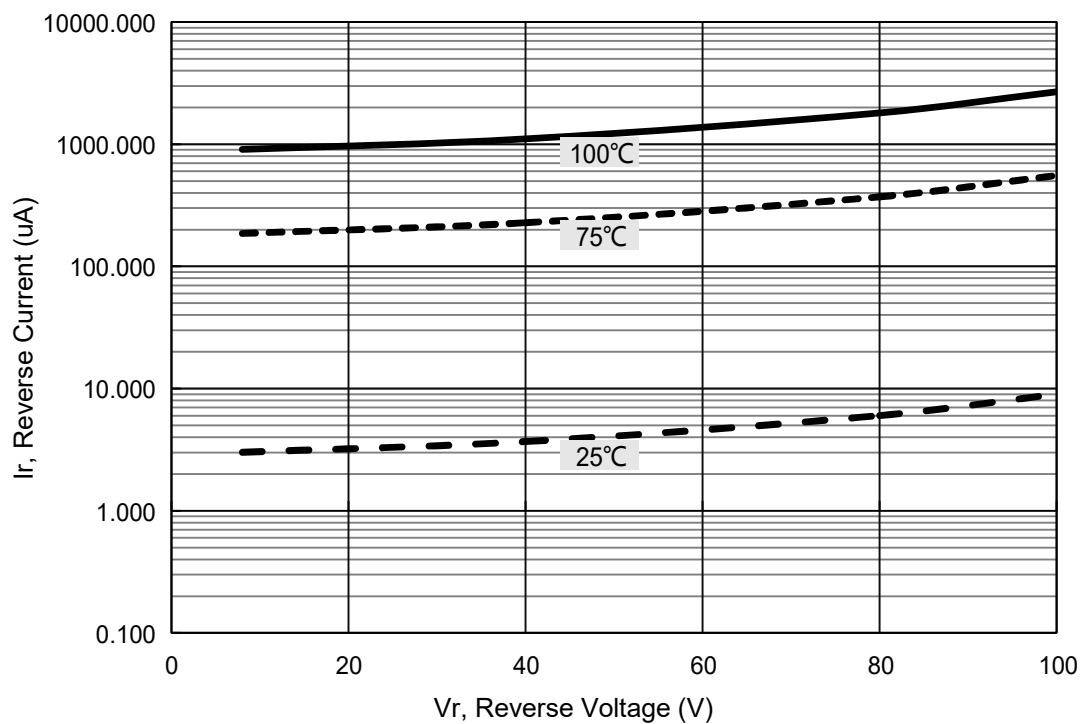
The forward voltage and forward current curve



Current derating curve, per element

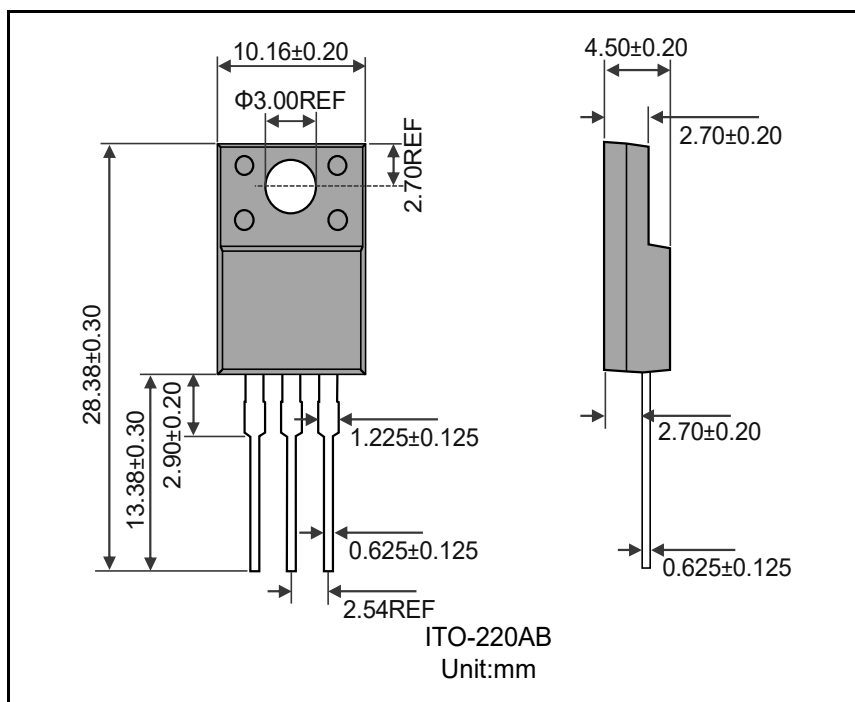


The reverse leak current and the reverse voltage (single-device) curve.

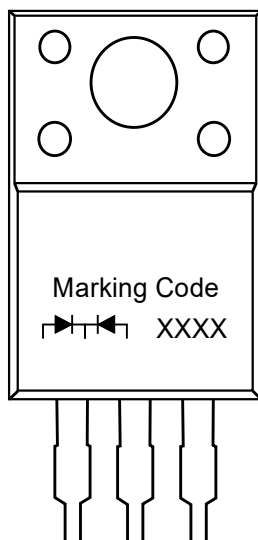




Package Outline Dimensions



Marking Information



“Marking Code”= The Following

“XXXX”= Date Code Marking

Marking Code	Part Number
EBR40L100F	EBR40L100FCT
	EBR40L100FCT-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