



High-Voltage Schottky Diodes

TO-220

ITO-220

Product Character

- Half Bridge Rectified、Common Cathode Structure.
- Multilayer Metal -Silicon Potential Structure.
- Beautiful High Temperature Character.
- Have Over Voltage protect loop, high reliability.
- 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

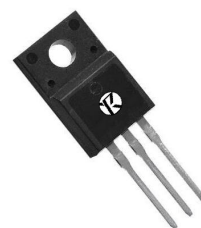
- MBR10100CT/MBR10100FCT Device optimized for ultra-low forward voltage drop to maximize efficiency in Power Supply applications.

Device Weight :

ITO-220AB-1.48g TO-220AB-1.96g TO-263-1.78g

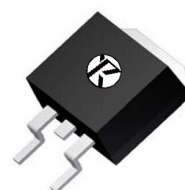


123

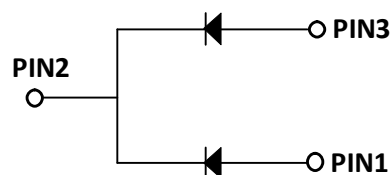


123

TO-263



123



Absolute Maximum Ratings

Item	Symbol	Data	Unit
Maximal Inverted Repetitive Peak Voltage	VRRM	100	V
*Average Rectified Forward Current (Rated VR-20Khz Square Wave) - 50% duty cycle	IFAV	10	A
Typical Thermal Resistance (per leg) Package =TO-220AB/TO-263 Package =ITO-220AB	R _{θJc}	2	°C/W
		4	°C/W
Forward Peak Surge Current(Rated Load 8.3 Half Mssine Wave-According to JEDEC Method)	IFSM	150	A
Maximum Rate of Voltage Change (at Rated VR)	dv/dt	10000	V/uS
Peak Repetitive Reverse Surge Current (2uS-1Khz)	IRRM	0.5	A
Operating Junction Temperature	TJ	-40- +150	°C
Storage Temperature	TSTG	-40- +150	°C

Electricity Character

Item	Test Condition		TYP.	MAX.	Unit
IR	TJ =25°C	VR=VRRM		10	uA
	TJ =125°C			1	mA
VF	TJ =25°C	IF=5A	0.79	0.83	V
	TJ =125°C	IF=5A		0.76	V

*IF(AV)= 5A×2

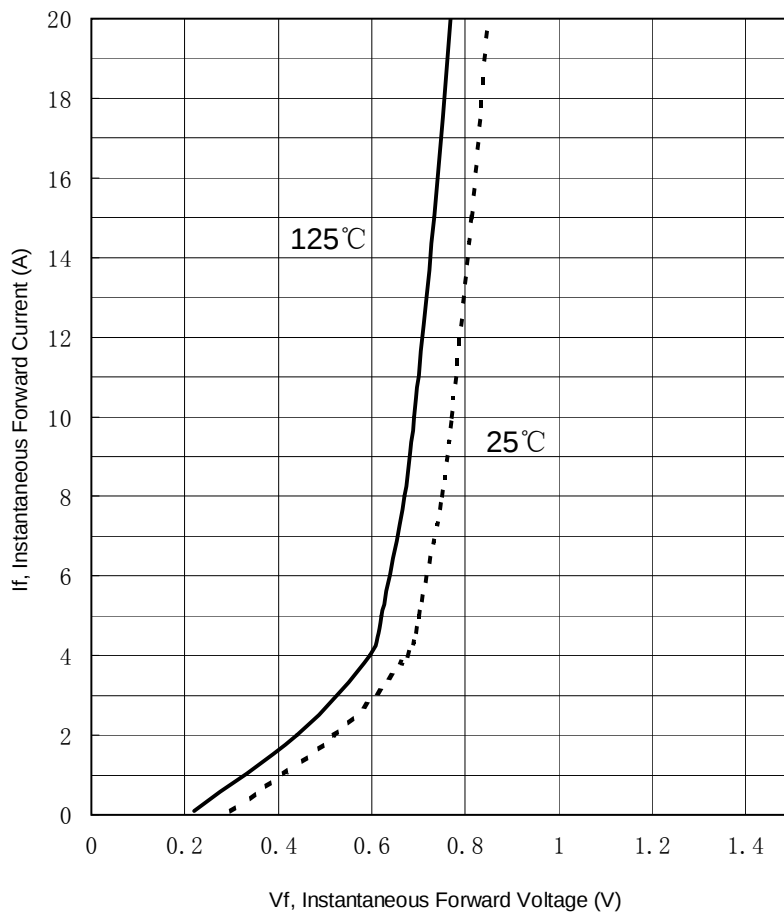


High-Voltage Schottky Diodes

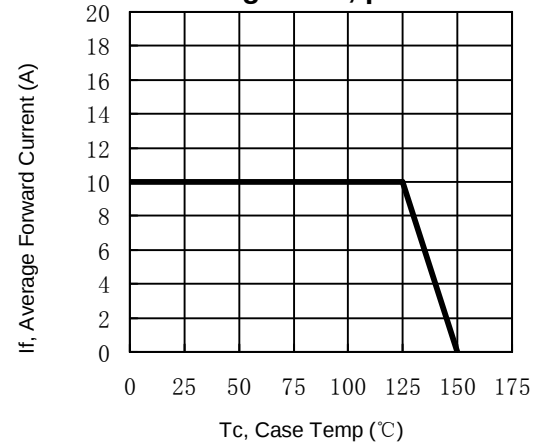
MBR10100CT/MBR10100FCT

Characteristic Curves

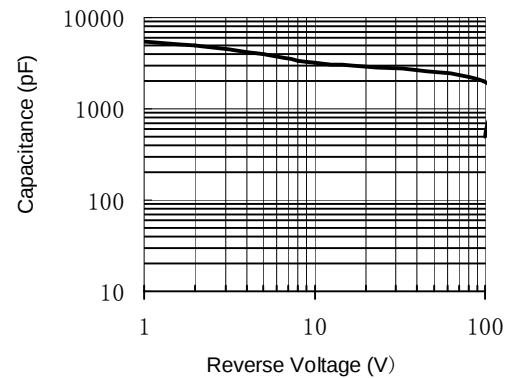
The forward voltage and forward current curve



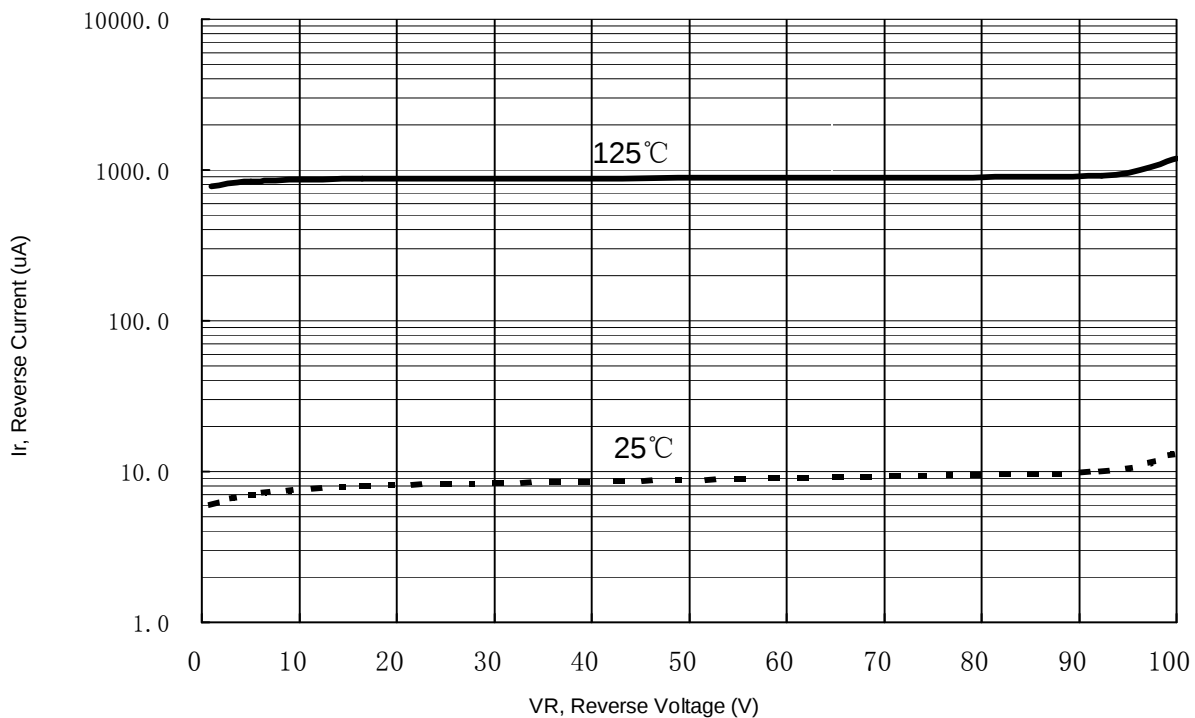
Current derating curve, per element



The crunode capacitance curve

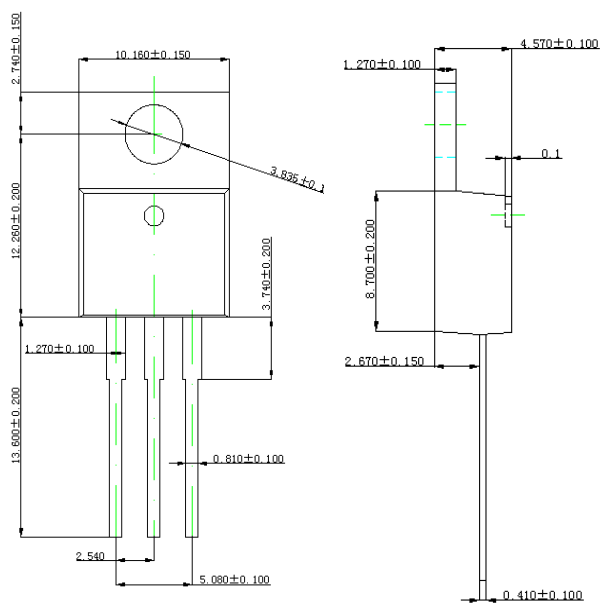


The reverse leak current and the reverse voltage (single-device) curve.

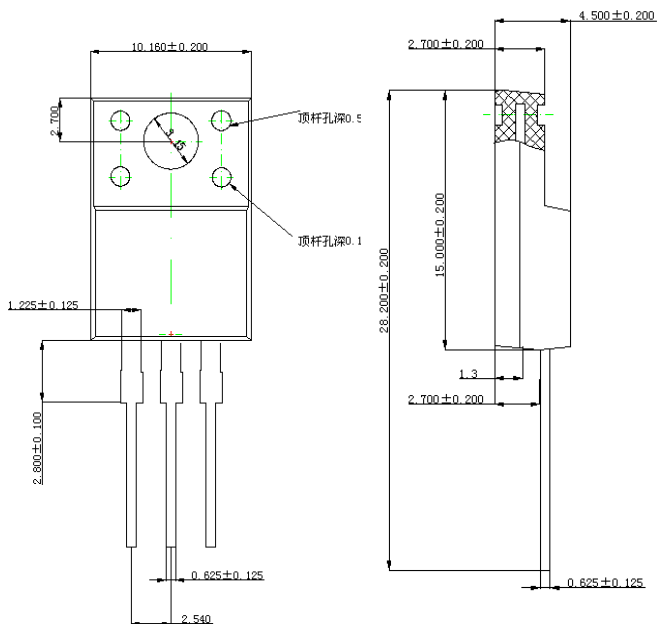


Package Outline Dimensions

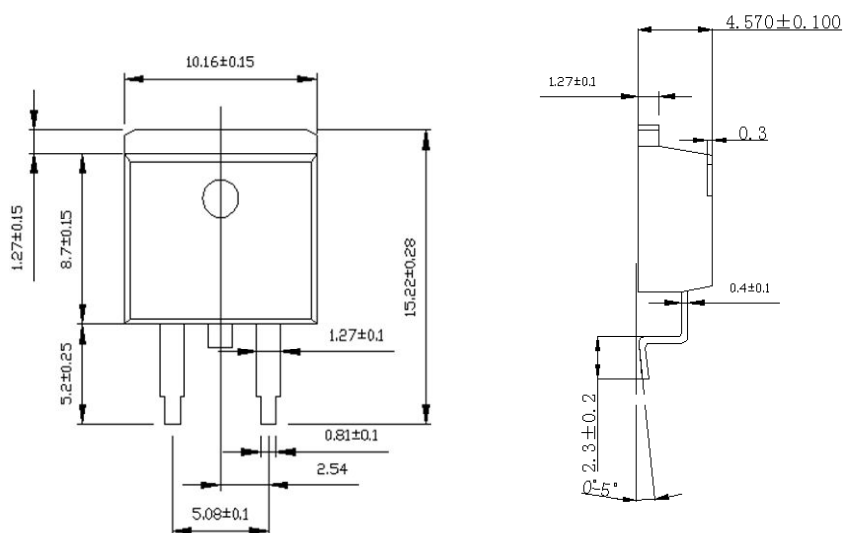
TO-220



ITO-220



TO-263

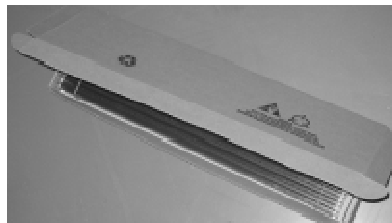
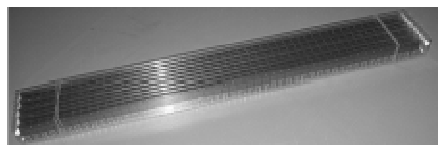


High-Voltage Schottky Diodes

MBR10100CT/MBR10100FCT

Packing Information

Part Number	Package	Delivery Mode
MBR10100CT	TO-220/TO-263	50 pieces / tube
MBR10100FCT	ITO-220	50 pieces / tube



Part Number	Quantity	Size (mm)
tube	50 pieces	530*33*7
inner box	1000 pieces	560*150*40
outer container	5000 pieces	580*230*170