



# High-Voltage Schottky Diodes

MBR30100PT

## 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.

TO-247



## Primary Use

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

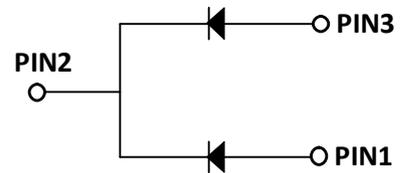
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MBR30100PT Device optimized for ultra-low forward voltage drop to maximize efficiency in Power Supply applications.

**Device Weight :**

TO-247AB-6.3g



## 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	30	A
Typical Thermal Resistance (per leg Package =TO-220AB/TO-263 Package =ITO-220AB)	R <sub>θjc</sub>	2	°C/W
		4	°C/W
Forward Peak Surge Current(Rated Load 8.3 Half Mssine Wave-According to JEDEC Method)	IFSM	200	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=15A	0.84	0.86	V
	TJ =125°C	IF=15A		0.78	V

\*IF(AV)= 15A×2

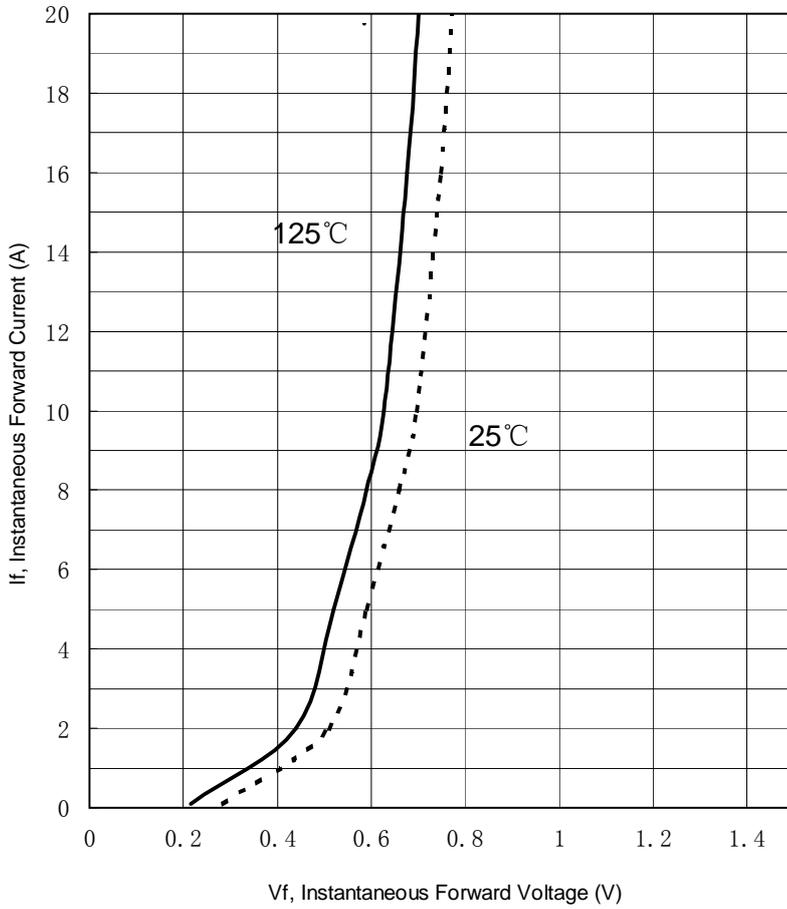


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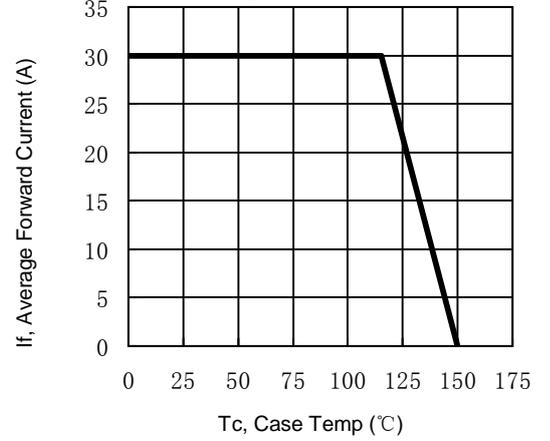
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## Characteristic Curves

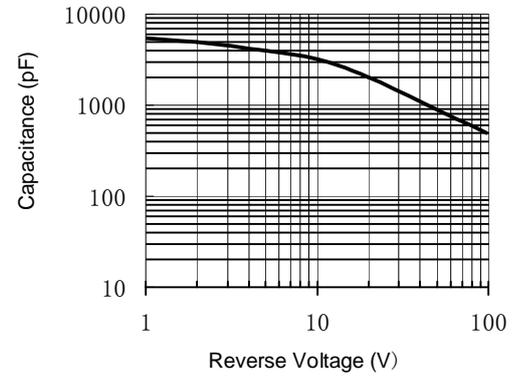
The forward voltage and forward current curve



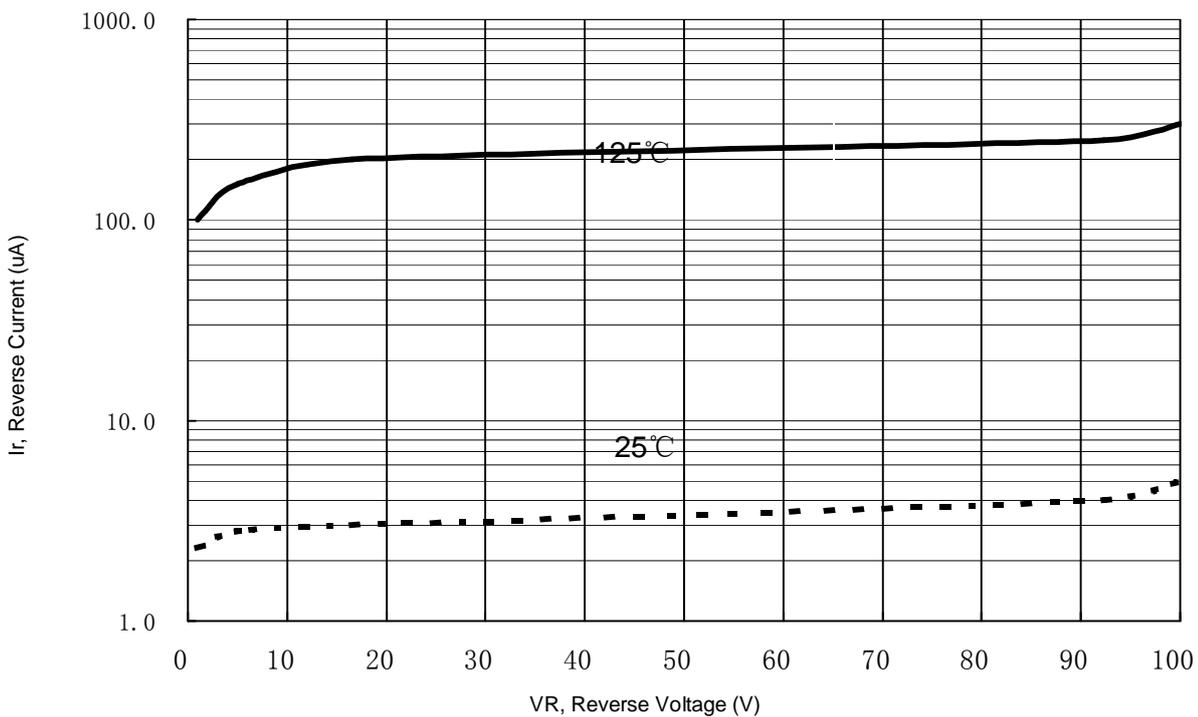
Current derating curve, per element



The junction capacitance curve



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



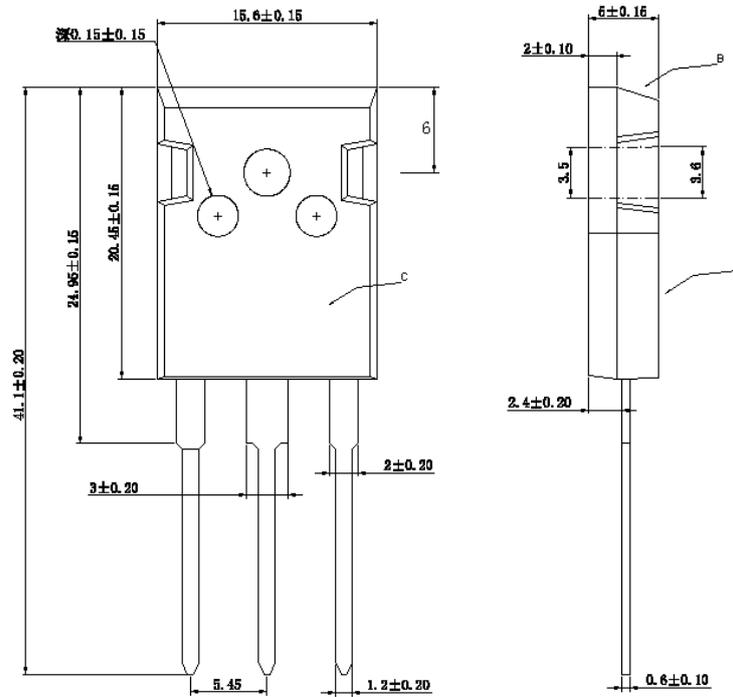


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## Package Outline Dimensions

### TO-247



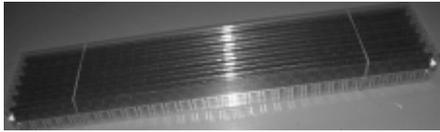


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## Packing Information

Part Number	Package	Delivery Mode
MBR30100PT	TO-247AB	30 pieces / tube



Part Number	Quantity	Size (mm)
tube	30 pieces	495*46*8
inner box	360 pieces	510*110*6
outer container	1800 pieces	550*320*14