GIE
Global Intelligent Electronics

MBR1040FCT~MBR10200FCT

RoHS ✓ 2002/94/EC Pb LEAD-FREE

Schottky Barrier Rectifiers

VOLTAGE 40 to 200 Volts **CURRENT** 10 Ampere

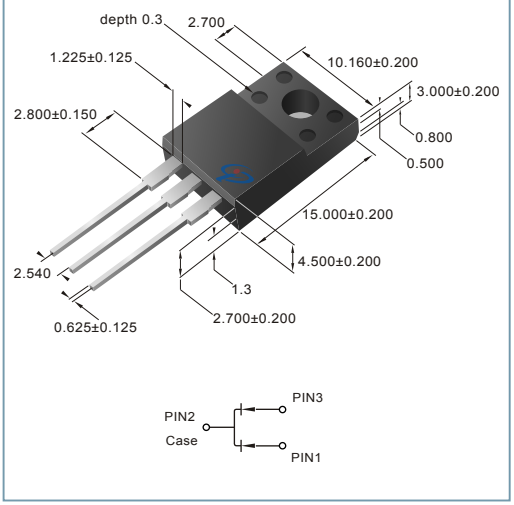
FEATURES

- Half Bridge Rectified, Common Cathode Structure
- Multilayer Metal - Silicon Potential Structure
- Beatiful High Temperature Character
- Have Over Voltage protect loop, high reliability
- RoHs Products
- Low Voltage High Frequency Switching Power Supply
- Low Voltage High Frequency Invers Circuit
- Low Voltage Continued Circuit and Protection Circuit

MECHANICAL DATA

- Operating Junction Temperature: -40°C to +175°C
- Storage Temperature: -40°C to +175°C
- Weight: 1.48g
- Marking: Type Number

ITO-220AB Unit : inch(mm)



MAXIMUM RATINGS AND ELETRICAL CHARACTERISTICS

PARAMETER	SYMBOL	MBR1040FCT	MBR1060FCT	MBR10100FCT	MBR10150FCT	MBR10200FCT	UNITS
Maximum Inverted Repetitive Peak Voltage	V_{RRM}	45	60	100	150	200	V
*Average Rectified Forward Current (Rated VR-20Khz Square Wave) - 50 duty cycle	$I_{F(AV)}$	10					A
Typical Thermal resistance (per leg) To-220AB	$R_{\Theta JA}$	2					°C/W
Typical Thermal resistance (per leg) ITo-220AB	$R_{\Theta JA}$	4					°C/W
Forward Peak Surge Current(Rated Load 8.3ms half Mssine Wave-According to JEDECmethod)	I_{FSM}	120					A
Maximum Rate of Voltage Change (at Rated VR)	dv/dt	10000					V/us
Peak Repetitive Reverse Surge Current (2uS-1Khz)	I_{RRM}	1					A
Maximum Forward Voltage T_J=25°C VR=VRRM	IR	10					uA
Maximum Forward Voltage T_J=125°C VR=VRRM	IR	1					mA
Typical Forward Voltage T_J=25°C IF=5A	VF	0.72		0.84	0.86	0.92	V
Typical Forward Voltage T_J=125°C IF=5A	VF	0.59~0.64		0.61~0.65	0.63~0.68	0.66~0.72	V

*IF(AV) = 5A*2

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High Voltage Schottky Diodes(MBR1040FCT)

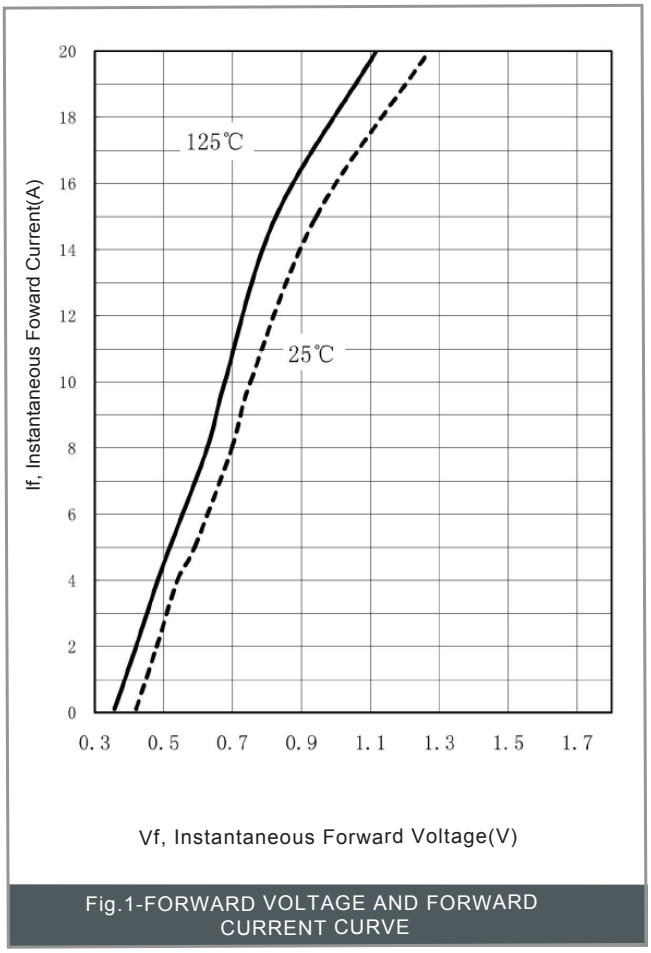

Fig.1-FORWARD VOLTAGE AND FORWARD CURRENT CURVE

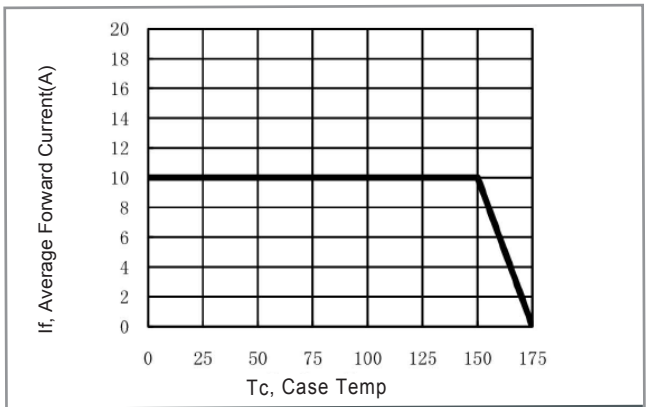

Fig.2- CURRENT DERATING CURVE, PER ELEMENT

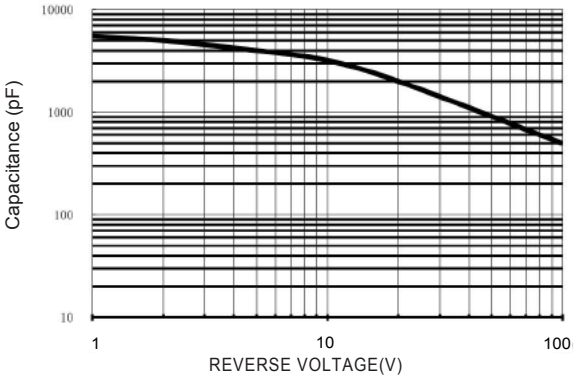

Fig.3-THE CRUNODE CAPACITANCE CURVE

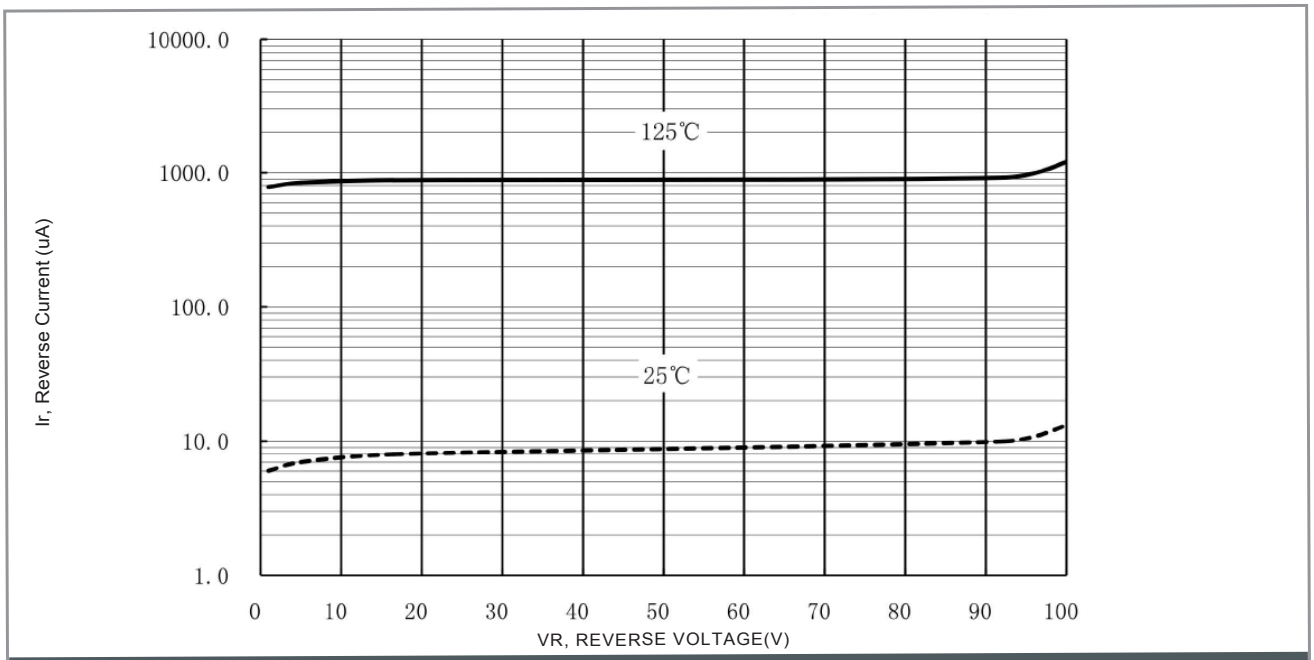

Fig.4- THE REVERSE LEAK CURRENT AND THE REVERSE VOLTAGE(SINGLE-DEVICE) CURVE

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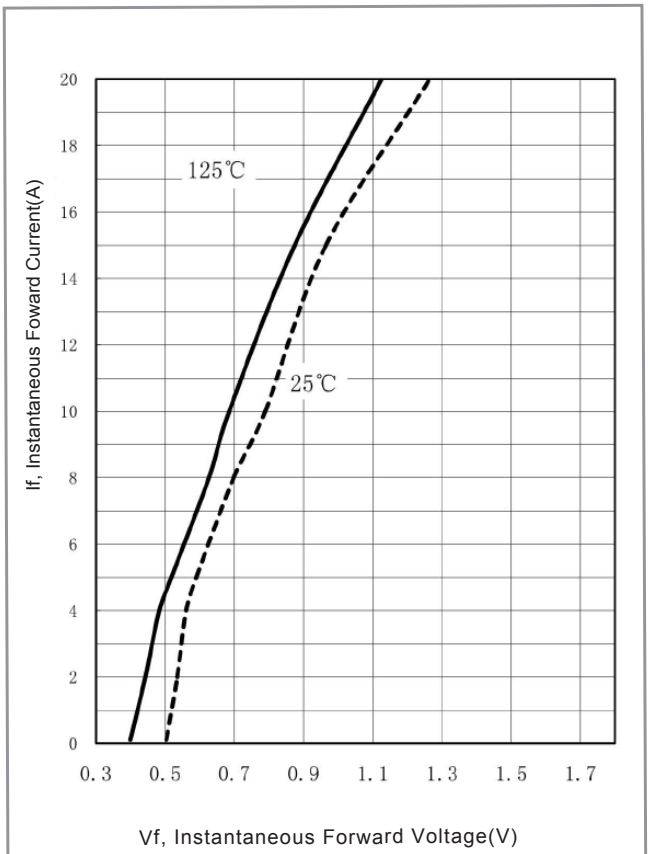
High Voltage Schottky Diodes(MBR1060FCT)



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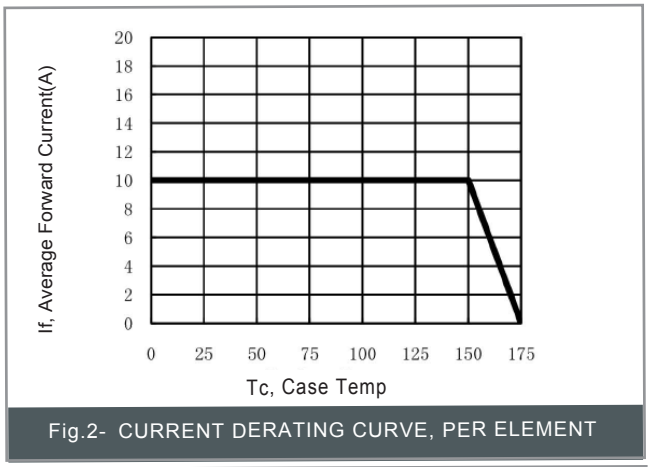

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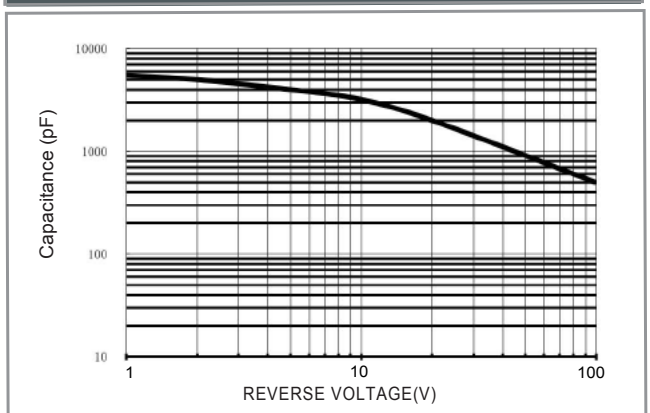
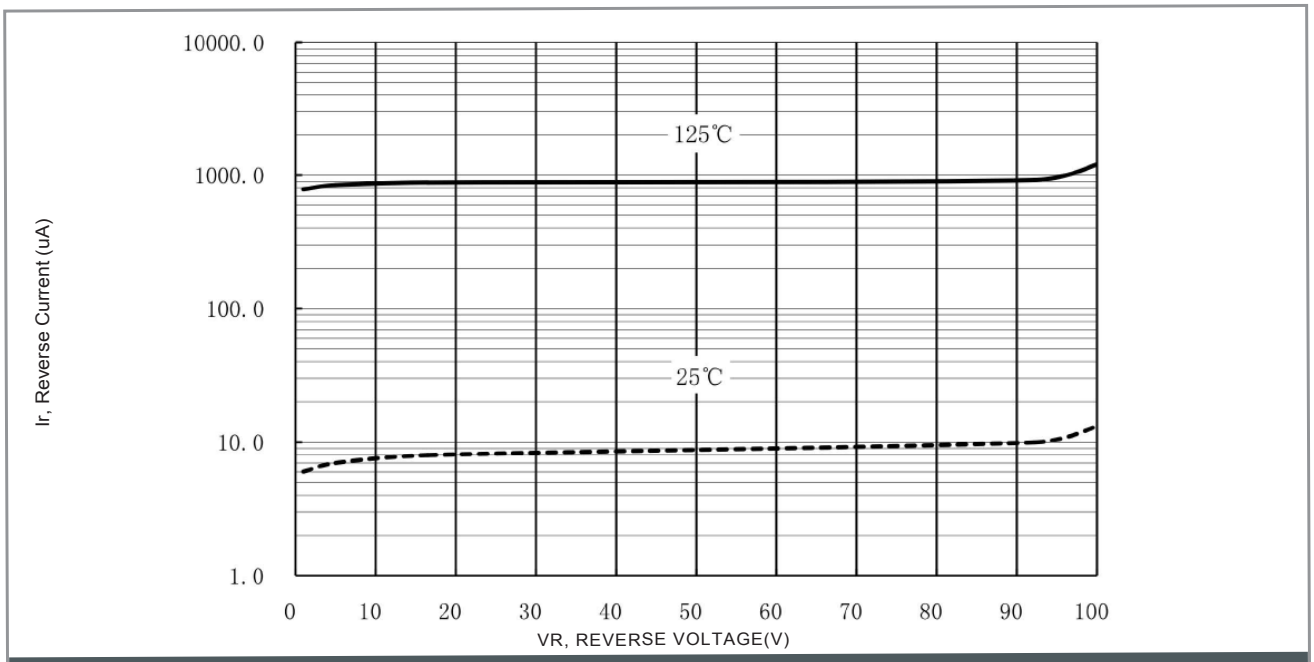


Fig.3-THE CRUNODE CAPACITANCE CURVE



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MBR1040FCT~MBR10200FCT

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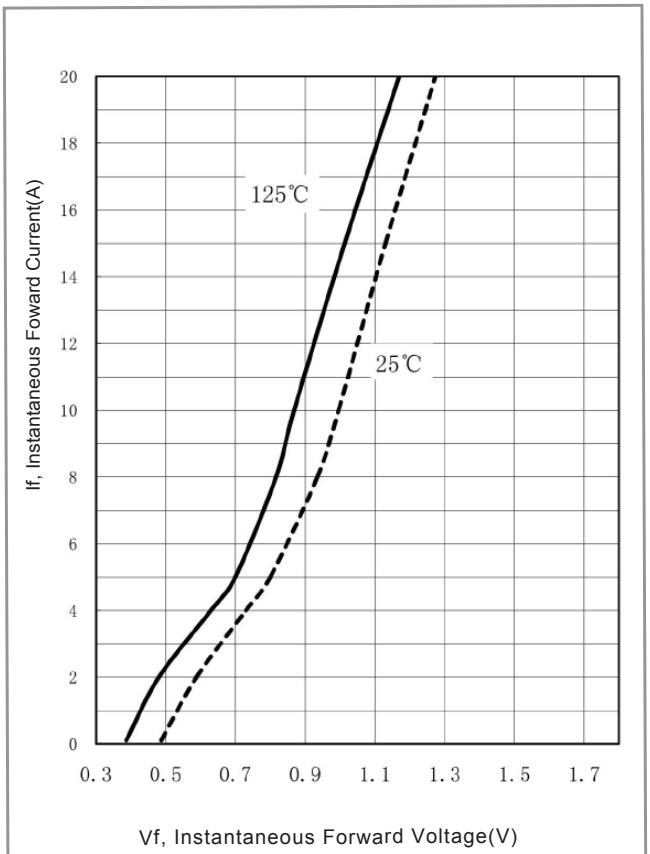
High Voltage Schottky Diodes(MBR10100FCT)



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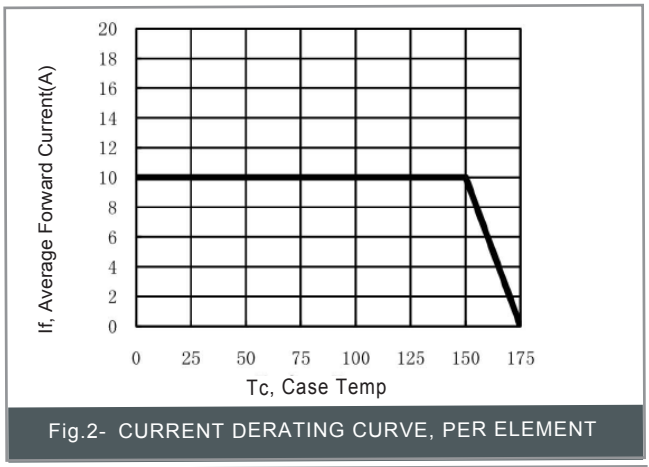

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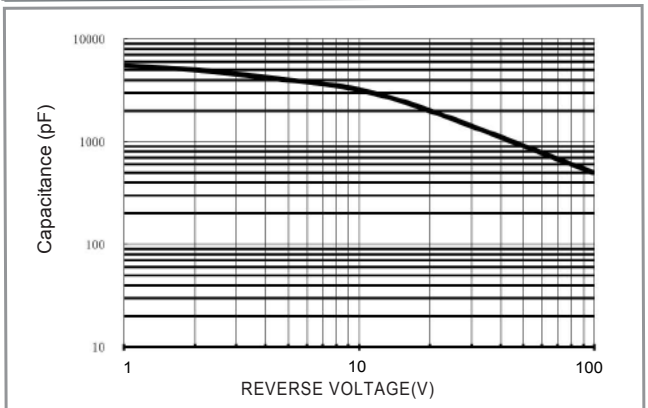
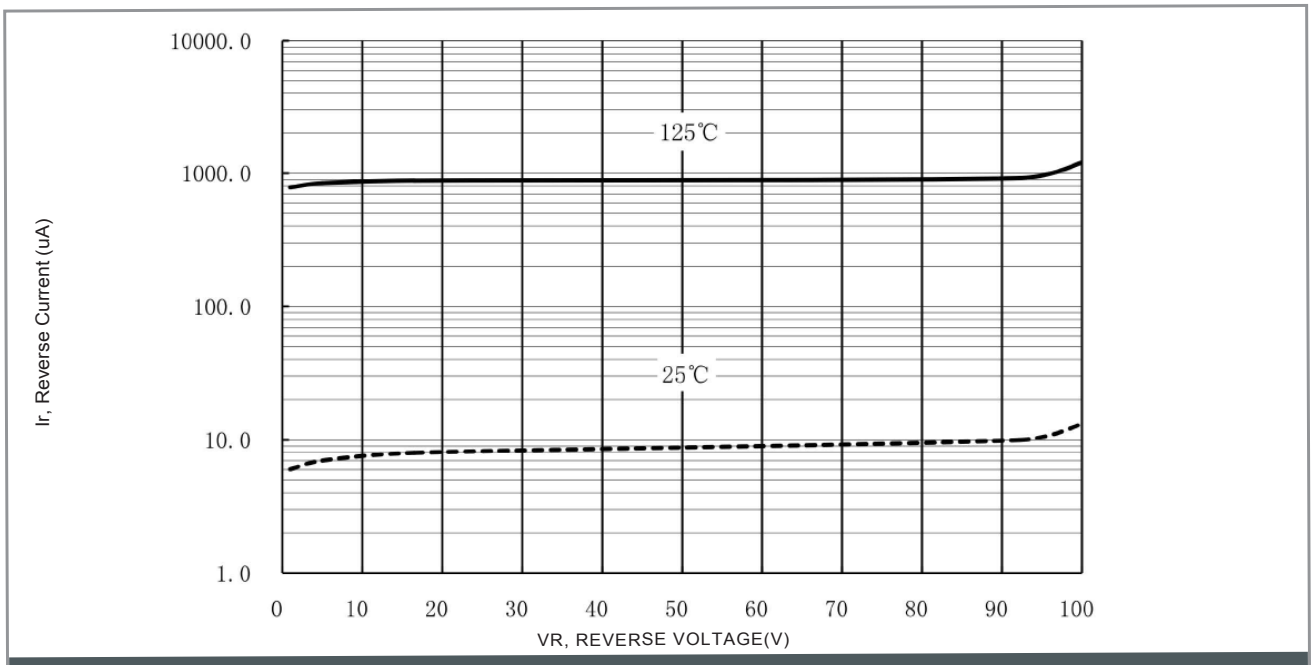


Fig.3-THE CRUNODE CAPACITANCE CURVE



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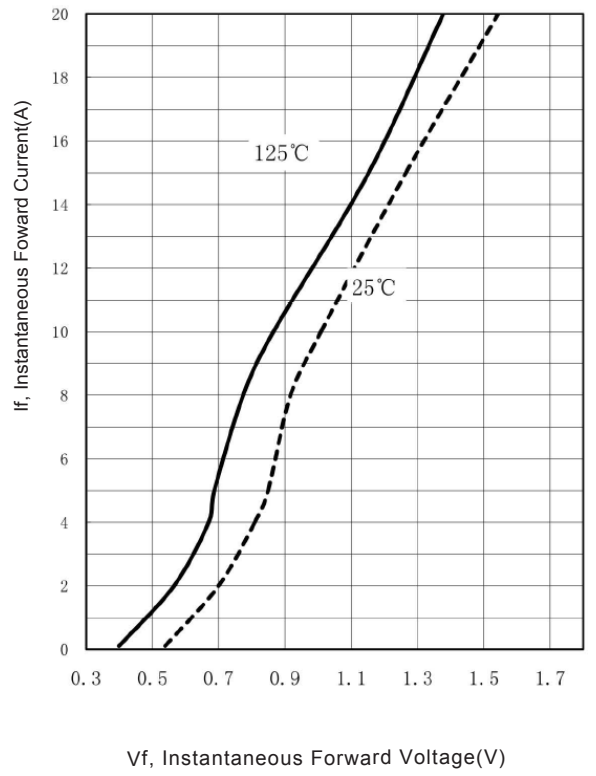
High Voltage Schottky Diodes(MBR10150FCT)



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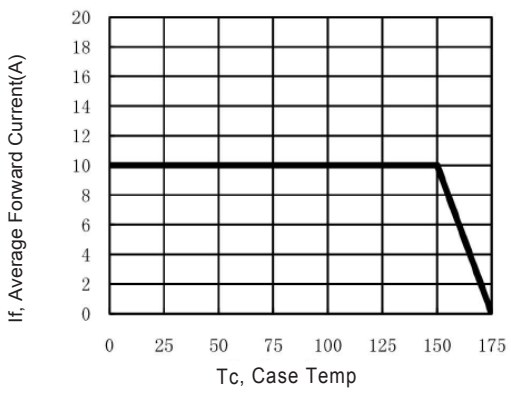

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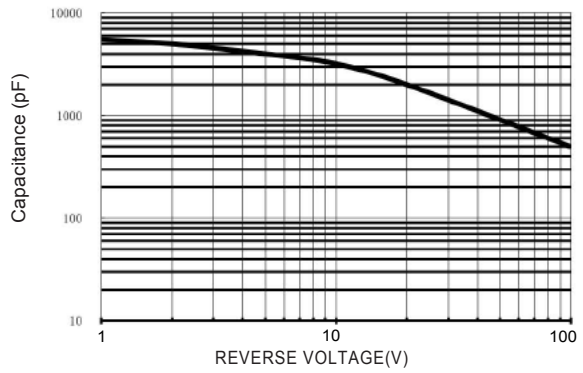

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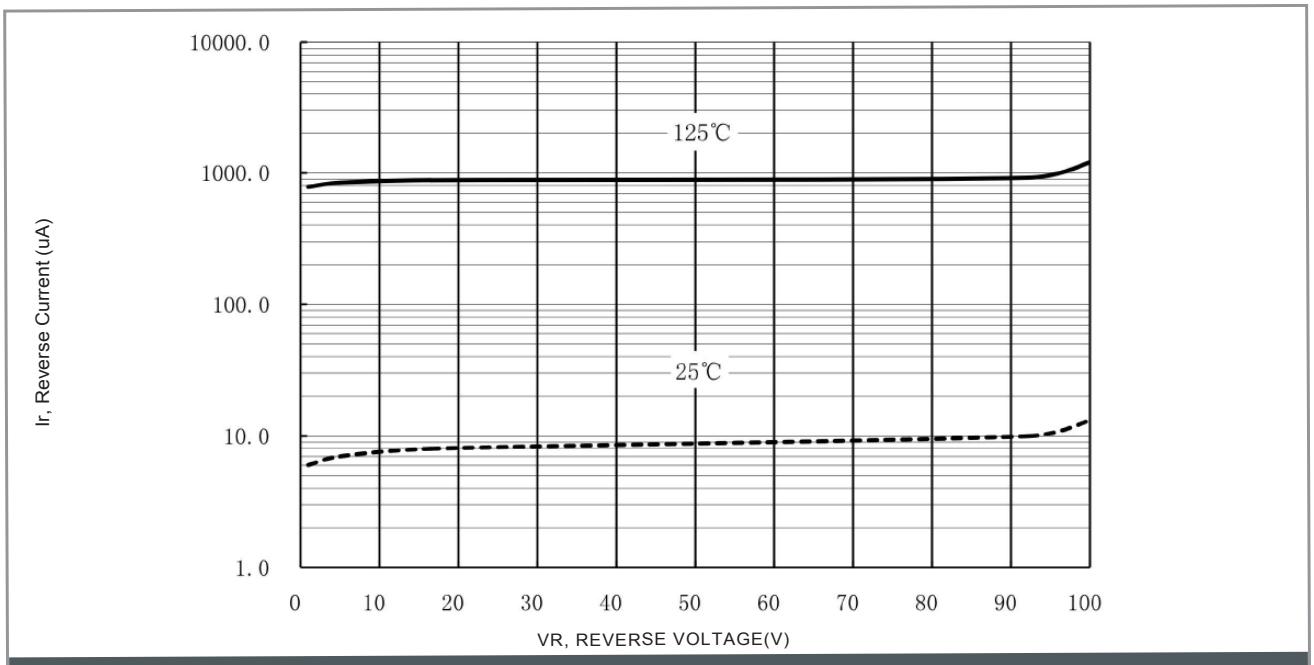

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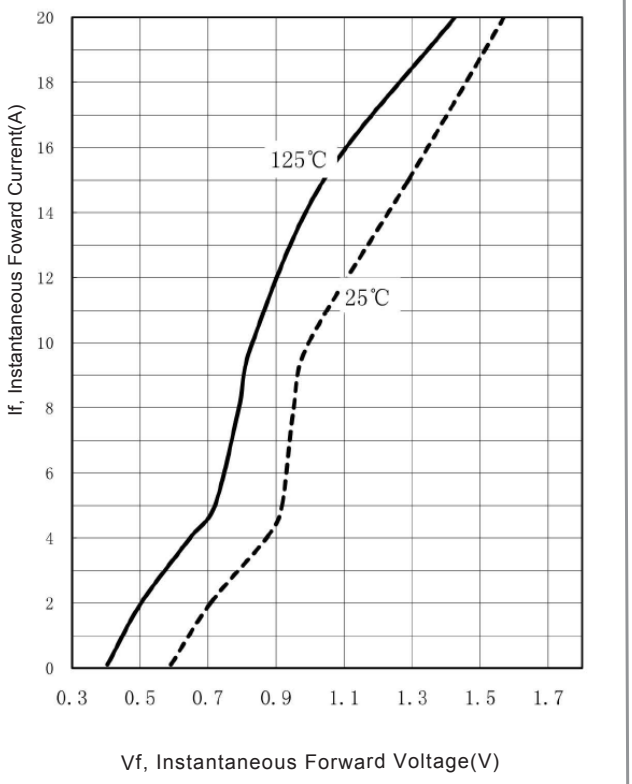

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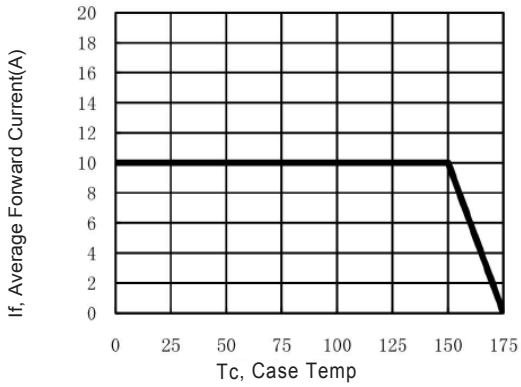

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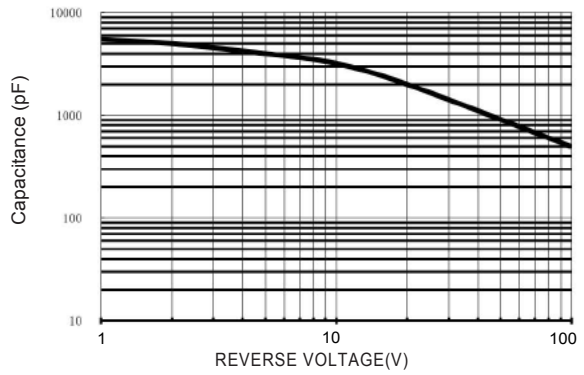

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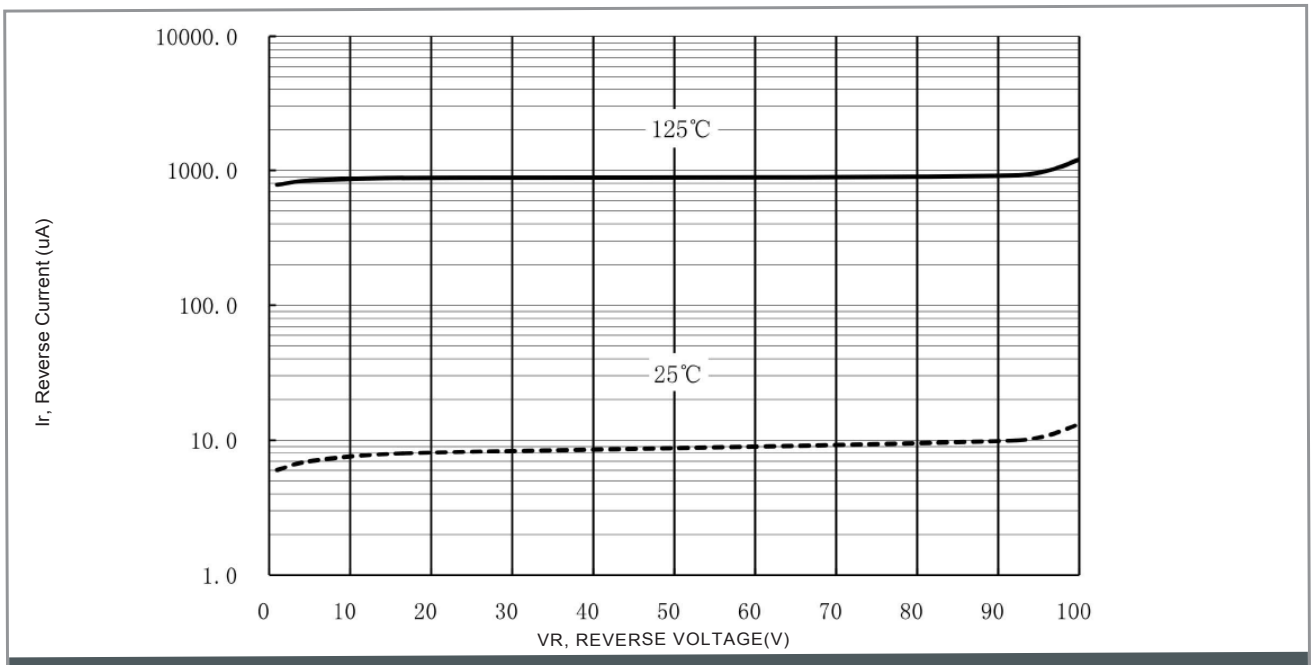

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