



# MBR10200FCT

## Schottky Barrier Rectifier

**Voltage** 200 V **Current** 10 A

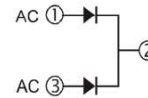
### Features

- Low power loss, high efficiency
- High surge current capability
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

### Mechanical Data

- Case : ITO-220AB-1 Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0765 ounces, 2.17 grams

ITO-220AB-1



### Maximum Ratings and Thermal Characteristics (T<sub>A</sub> = 25 °C unless otherwise noted)

PARAMETER		SYMBOL	LIMIT	UNITS
Maximum Repetitive Peak Reverse Voltage		V <sub>RRM</sub>	200	V
Maximum Rms Voltage		V <sub>RMS</sub>	140	V
Maximum Dc Blocking Voltage		V <sub>DC</sub>	200	V
Maximum Average Forward Current	Per Device	I <sub>F(AV)</sub>	10	A
	Per Diode		5	
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load Per Diode		I <sub>FSM</sub>	150	A
Typical Junction Capacitance Measured at 1 MHZ And Applied V <sub>R</sub> = 4 V		C <sub>J</sub>	81	pF
Typical Thermal Resistance Per Diode <sup>(Note 1)</sup>		R <sub>θJC</sub>	2	°C/W
Operating Junction Temperature Range		T <sub>J</sub>	-65~175	°C
Storage Temperature Range		T <sub>STG</sub>	-65~175	°C



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## Electrical Characteristics ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	$V_F$	$I_F = 1\text{ A}, T_J = 25^\circ\text{C}$	-	0.68	-	V
		$I_F = 5\text{ A}, T_J = 25^\circ\text{C}$	-	0.81	0.9	
		$I_F = 1\text{ A}, T_J = 125^\circ\text{C}$	-	0.53	-	
		$I_F = 5\text{ A}, T_J = 125^\circ\text{C}$	-	0.68	-	
Reverse Current <sup>(Note 2)</sup>	$I_R$	$V_R = 200\text{ V}, T_J = 25^\circ\text{C}$	-	-	0.05	mA
		$V_R = 200\text{ V}, T_J = 125^\circ\text{C}$	-	-	20	

NOTES:

1. Mounted on infinite heatsink
2. Short duration pulse test used to minimize self-heating effect



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## TYPICAL CHARACTERISTIC CURVES

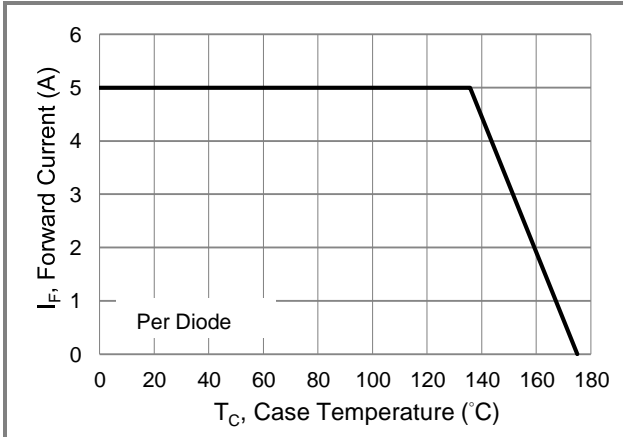


Fig.1 Forward Current Derating Curve

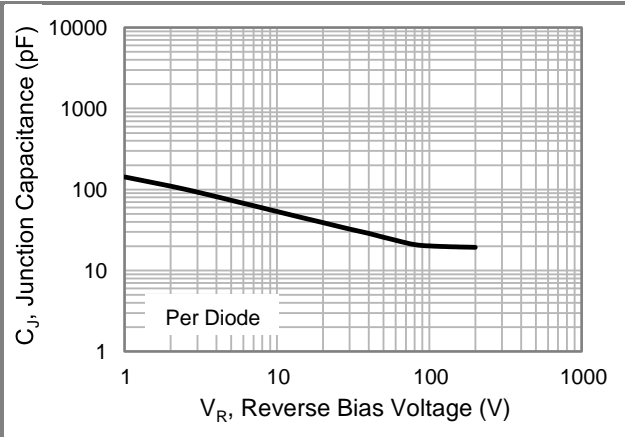


Fig.2 Typical Junction Capacitance

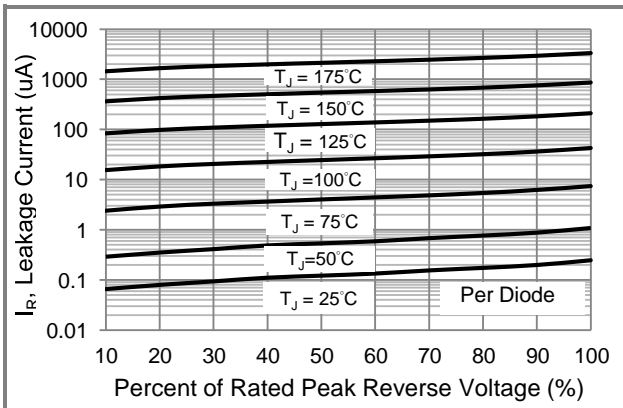


Fig.3 Typical Reverse Characteristics

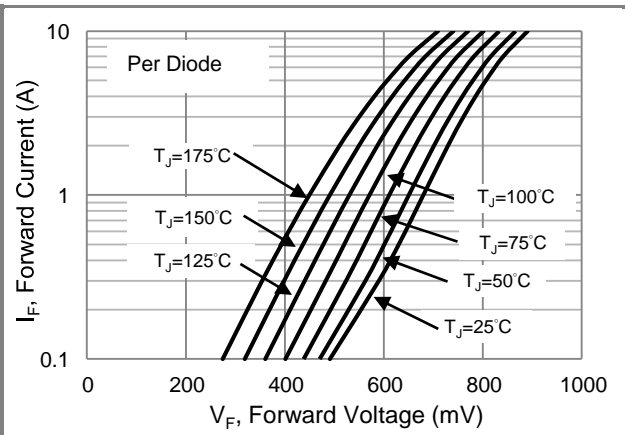


Fig.4 Typical Forward Characteristics

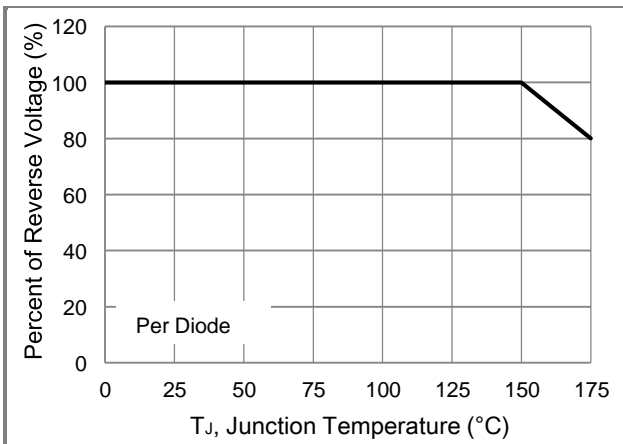


Fig.5 Operating Temperature Derating Curve

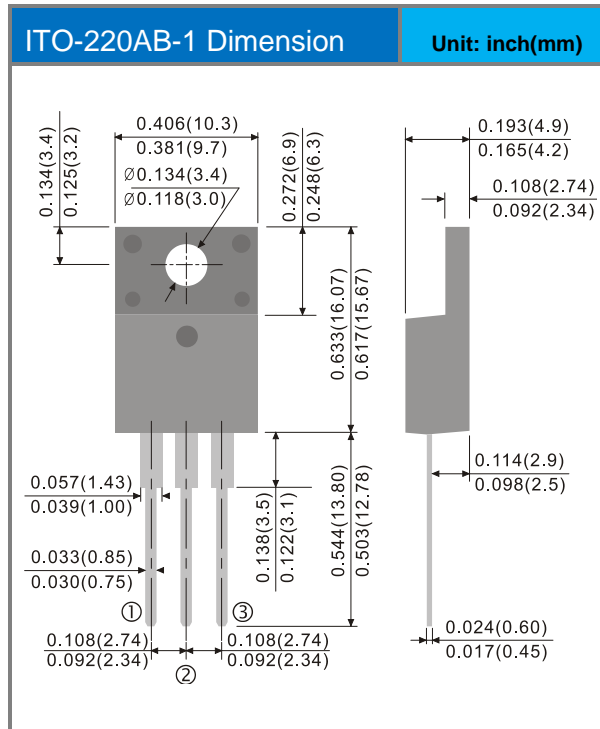


# MBR10200FCT

Part No. Packing Code Version

Part No. Packing Code	Package Type	Packing Type	Marking	Version
MBR10200FCT_T0_00101	ITO-220AB-1	50pcs / Tube	MBR10200FCT	Halogen free

## Packaging Information





## **MBR10200FCT**

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