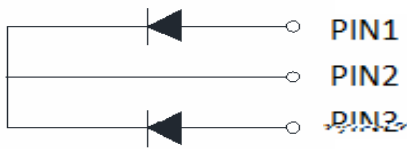
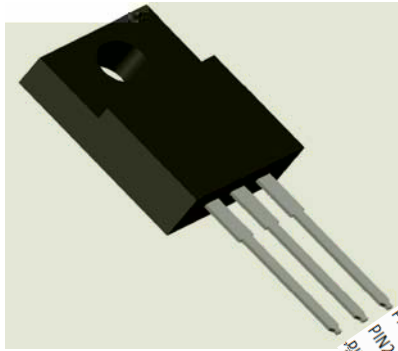


## Schottky Diodes



### Features

- High frequency operation
- Low forward voltage drop
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Guard ring for enhanced ruggedness and long term reliability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

### Typical Applications

Typical applications are in switching power supplies, converters, freewheeling diodes, and reverse battery protection.

### Mechanical Data

P

**Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102

**Polarity:** As marked

### Maximum Ratings (T<sub>a</sub>=25 Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	MBR10100FCTS	MBR10150FCTS	MBR10200FCTS
Device marking code			MBR10100FCTS	MBR10150FCTS	MBR10200FCTS
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	V	100	150	200
Average Rectified Output Current @60Hz sine wave, R-load, T <sub>c</sub> =140 °C	I <sub>AV</sub>	A			
Current Squared Time @1ms ≤ t ≤ 8.3ms T <sub>j</sub> =25	I <sup>2</sup> t	A <sup>2</sup> s		41	
Storage Temperature	T <sub>stg</sub>			-55 ~ +175	
Junction Temperature	T <sub>j</sub>			-55 ~ +175	

### Electrical Characteristics T<sub>a</sub>=25 Unless otherwise specified

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	MBR10100FCTS	MBR10150FCTS	MBR10200FCTS
Maximum instantaneous forward voltage drop per diode	V <sub>FM</sub>	V	I <sub>FM</sub> =5.0A	0.85	0.9	0.95
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>RRM1</sub>	mA	V <sub>RM</sub> =V <sub>RRM</sub> T <sub>a</sub> =25	0.1		
	I <sub>RRM2</sub>		V <sub>RM</sub> =V <sub>RRM</sub> T <sub>a</sub> =125	20		

Note1:Pulse test:300uS pulse width,1% duty cycle

Note2:Pulse test:pulse width 40mS



# MBR10100FCTS THRU MBR10200FCTS

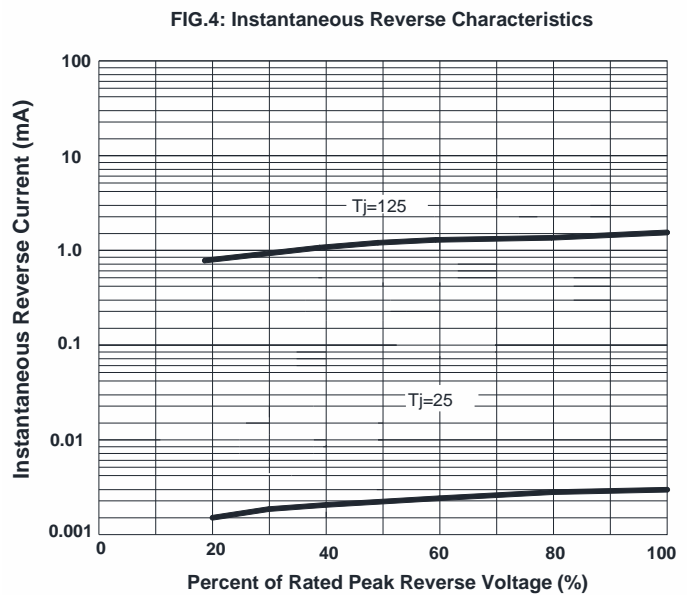
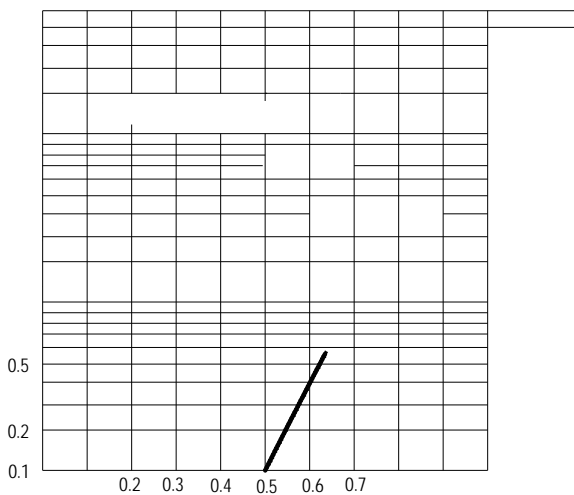
**Thermal Characteristics**  $T_a=25$  Unless otherwise specified

PARAMETER		SYMBOL	UNIT	MBR10100FCTS	MBR10150FCTS	MBR10200FCTS
Thermal Resistance	Between junction and case	$R_{J-C}$	/W	4.0		

**Ordering Information (Example)**

PREFERED P/N	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MBR10100FCTS THRU MBR10200FCTS	Approximate 1.9	50	1000	5000	Tube

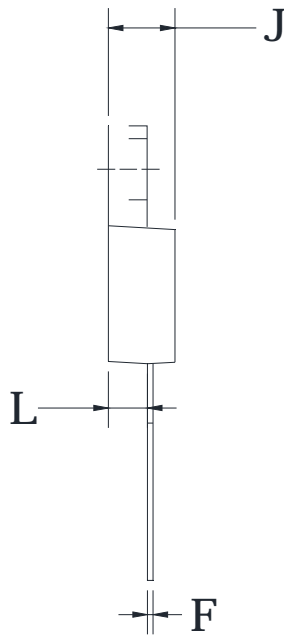
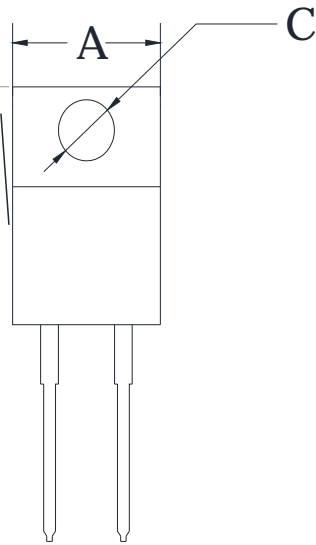
**Characteristics (Typical)**





# MBR10100FCTS THRU MBR10200FCTS

## Outline Dimensions



ITO-220AB		
Dim	Min	Max
A	9.8	10.2
B	2.25	2.75
C	2.95	3.45
D	14.75	15.25
E	3.05	3.95
F	0.45	0.75
G	0.45	0.75
H	13.4	14.2
I	2.35	2.75
J	4.3	4.8
K	2.58	2.82
L	2.58	2.82
M	1.47	1.77

## Disclaimer

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