

# MBR10200F

## Schottky Diodes

### Features

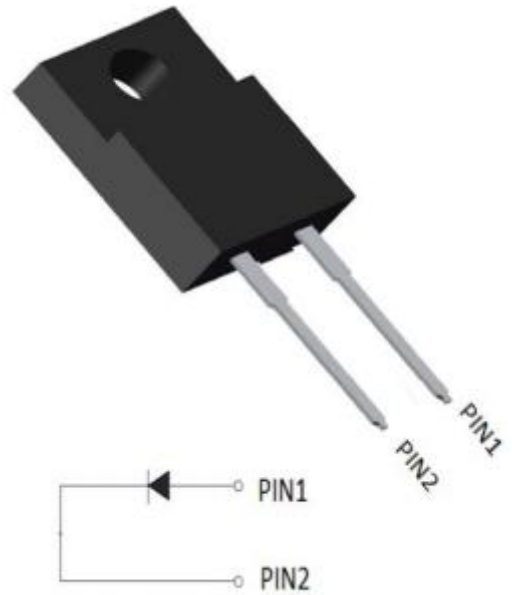
- High efficiency operation
- Guard ring for enhanced ruggedness and long term reliability
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Solder dip maximum peak of 275 °C /7s, per JESD 22-B106

### Typical Application

For use in switching power supplies, converters, freewheeling diodes and reverse battery protection.

### Mechanical Data

- Package: ITO-220AC  
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity: Color Band denotes cathode end



### Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	Symbol	Unit	Conditions	MBR10200F
Repetitive Peak Reverse Voltage	$V_{RRM}$	V		200
Average Rectified Output Current	$I_o$	A	60HZ Half-sine wave, Resistance load, Ta=25°C	10
Surge(Nonrepetitive)Forward Current	$I_{FSM}$	A	60HZ sine wave, 1 cycle, Ta=25°C	150
Current Squared Time	$I_{zt}$	A <sup>2</sup> s	1ms≤t<8.3ms Tj=25°C, Rating of per diode	94
Storage Temperature	$T_{stg}$	°C		-55 ~ +150
Junction Temperature	$T_j$	°C	IN DC Forward Mode-Forward Operations, without reverse bias, t ≤1 h (Fig. 1)①	-55 ~ +150

### Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	Symbol	Unit	Conditions	MBR10200F	
Peak Forward Voltage	$V_{FM}$	V	$I_{FM}=10A$	0.95	
Peak Reverse Current	$I_{RRM1}$	mA	$V_{RM}=V_{RRM}$	Ta=25°C	0.1
	$I_{RRM2}$			Ta=100°C	10
Thermal Resistance	$R_{\theta J-C}$	°C/W	Between junction and case	2.0	

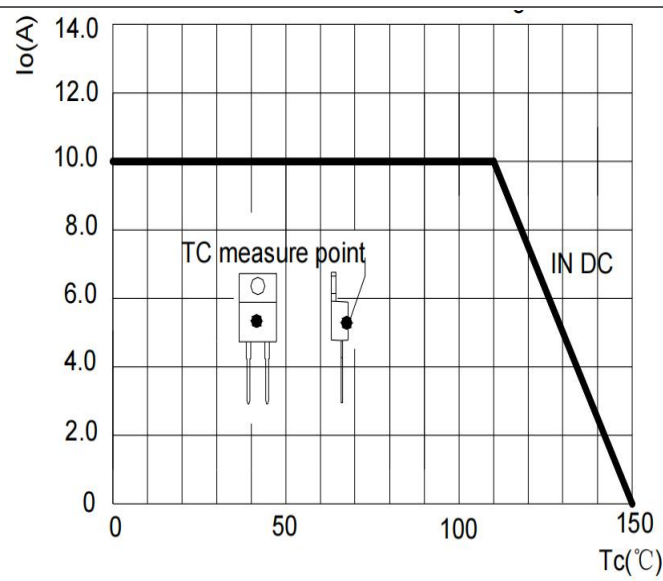
### NOTES:

① Meets the requirement of IEC 61215 Ed.2 bypass diode thermal test

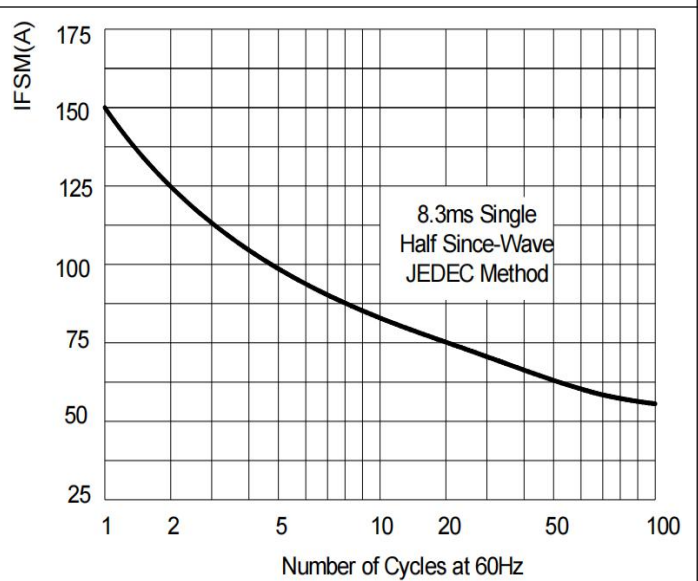


■ Characteristics (Typical)

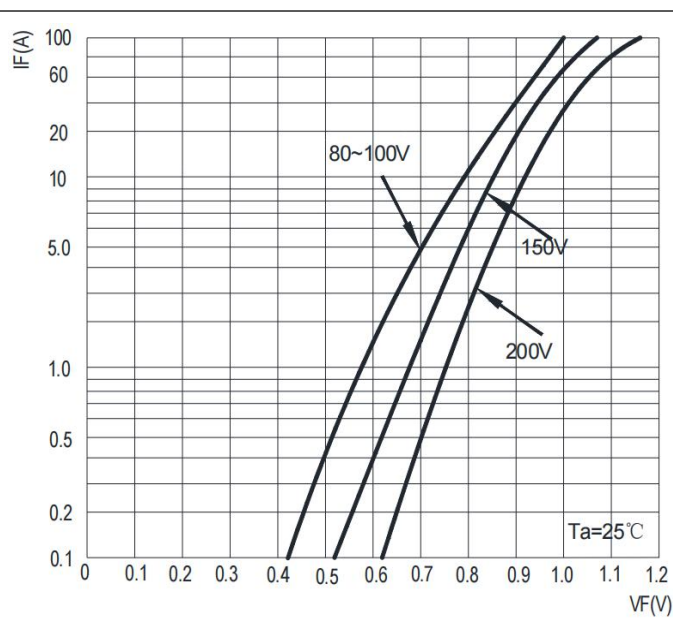
**FIG1: Forward Current Derating Curve**



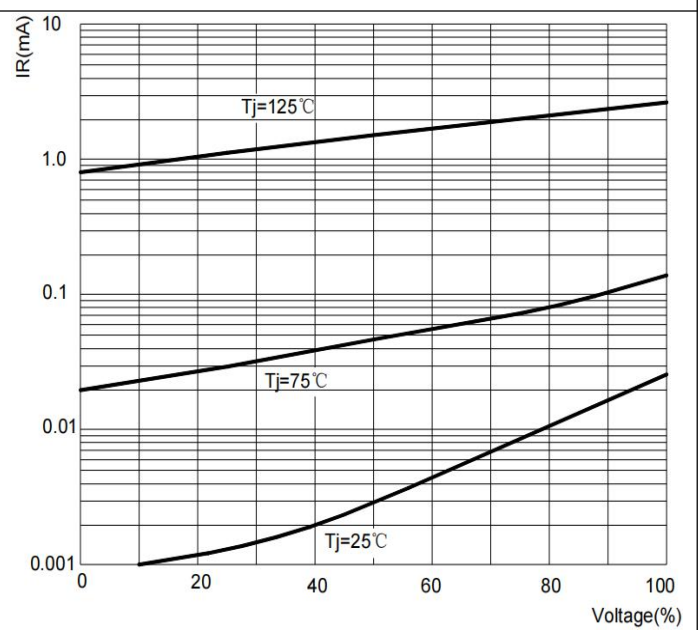
**FIG2: Surge Forward Current Capability**



**FIG3: Instantaneous Forward Voltage**



**FIG4: Typical Reverse Characteristics**



# MBR10200F

Schottky Diodes

Ordering Information (Example)

PREFERED	PACKAGE CODE	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MBR10200F	ITO-220AC	50	1000	5000	Tube

Outline Dimensions

