



MBR10100CT thru MBR10200CT

10.0A Schottky Barrier Rectifiers

Rectifier Reverse Voltage 100 to 200V

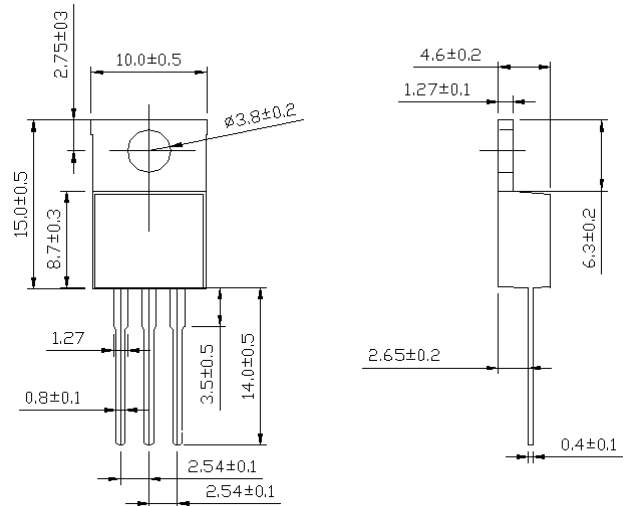
TO-220

Features

- High frequency operation
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Guard ring for enhanced ruggedness and long term reliability
- Solder dip 260 °C max. 8 s, per JESD 22-B106

Mechanical Data

- **Package:** TO-220AB
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** As marked



Dimensions in millimeters (1mm =0.0394")

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

PARAMETER	SYMBOL	UNIT	MBR10100CT	MBR10150CT	MBR10200CT
Device marking code			MBR10100CT	MBR10150CT	MBR10200CT
Repetitive Peak Reverse Voltage	VRRM	V	100	150	200
Average Rectified Output Current @60Hz sine wave, R-load, Ta=25°C	IO	A	10		
Surge(Non-repetitive)Forward Current @60Hz half sine-wave, 1 cycle, Ta=25°C	IFSM	A	90		
Current Squared Time @1ms≤t<8.3ms Tj=25°C,	I ² t	A ² s	33.6		
Storage Temperature	Tstg	°C	-55 ~ +175		
Junction Temperature	Tj	°C	-55 ~ +150		

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	MBR20100CT	MBR20150CT	MBR20200CT
Maximum instantaneous forward voltage drop per diode	VFM	V	IFM=5.0A	0.85	0.90	0.92
Maximum DC reverse current at rated DC blocking voltage per diode	I _{RRM1}	mA	V _{RM} =V _{VRRM} Ta=25°C	0.1	0.05	
	I _{RRM2}		V _{RM} =V _{VRRM} Ta=125°C	20		
Thermal Resistance	R _{θJ-C}	°C/W	Between junction and case	2.0		

Rating and Characteristic Curves ($T_A=25^{\circ}\text{C}$ Unless otherwise noted)

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FIG1: I_o - T_c Curve

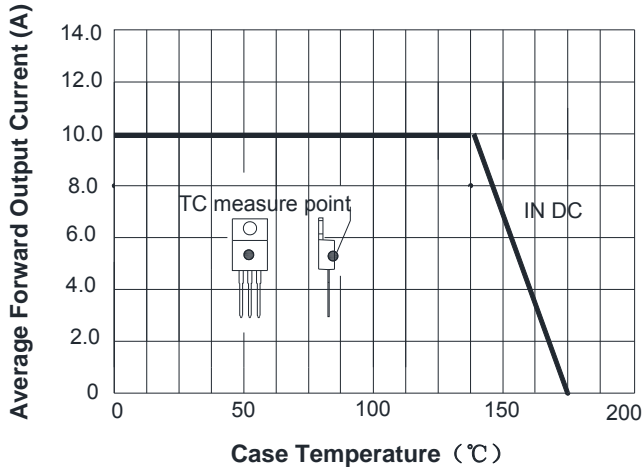


FIG2: Surge Forward Current Capability

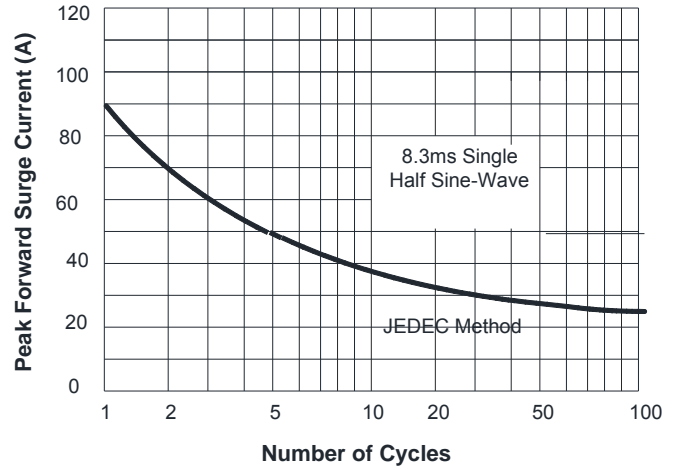


FIG3: Forward Voltage

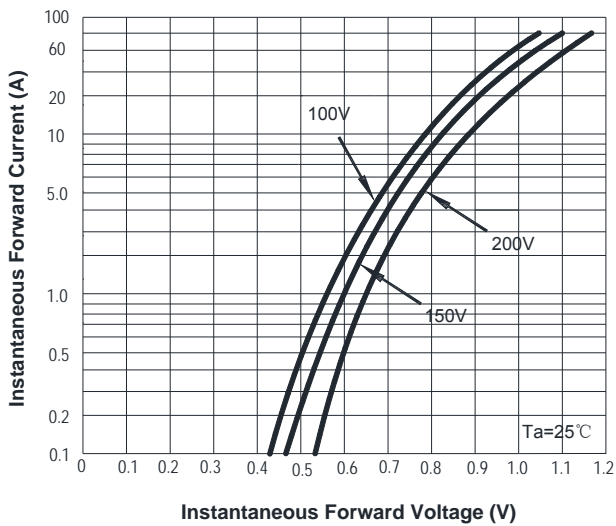


FIG4: Instantaneous Reverse Characteristics

