MBR10150CT thru MBR10200CT

10.0A Schottky Barrier Rectifiers

Rectifier Reverse Voltage 150 to 200V

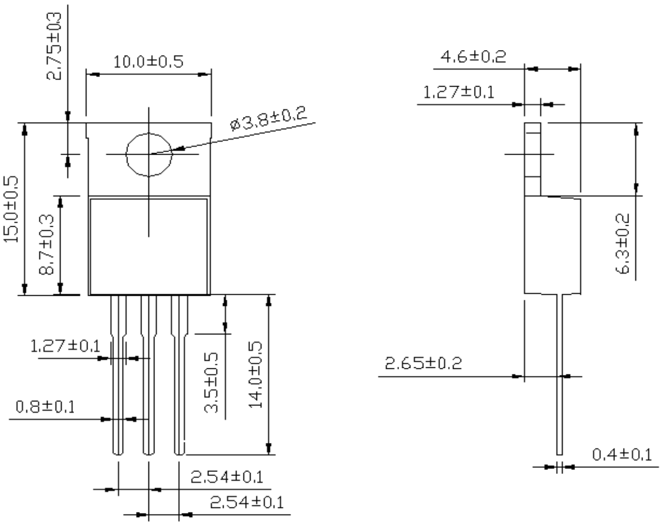
TO-220AB

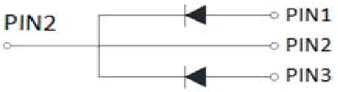
Features

- 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℃ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	MBR10150CT	MBR10200CT
Device marking code			MBR10150CT	MBR10200CT
Repetitive Peak Reverse Voltage	V_{RRM}	V	150	200
Average Rectified Output Current @60Hz sine wave, R-load, T_a=25℃	I_O	A	10	
Surge(Non-repetitive)Forward Current @60H_Z half sine-wave, 1 cycle, T_a=25℃	I_{FSM}	A	90	
Current Squared Time @1ms≤t<8.3ms Tj=25℃,	I^2t	A^2s	33.6	
Storage Temperature	Tstg	℃	-55 ~ +175	
Junction Temperature	Tj	℃	-55 ~ +175	

■Electrical Characteristics（Ta=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	MBR10150CT	MBR10200CT
Maximum instantaneous forward voltage drop per diode	V_{FM}	V	I_{FM}=5.0A	0.9	0.92
Maximum DC reverse current at rated DC blocking voltage per diode	I_{RRM1}	mA	$V_{RM}=V_{RRM}$ T_a=25℃	0.05	
	I_{RRM2}		$V_{RM}=V_{RRM}$ T_a=125℃	20	
Thermal Resistance Between junction and case	$R_{\theta J\text{-}C}$	℃/W		2.0	

Rating and Characteristic Curves (TA=25°C Unless otherwise noted)

MBR10150CT thru MBR10200CT

FIG1:Io -Tc Curve

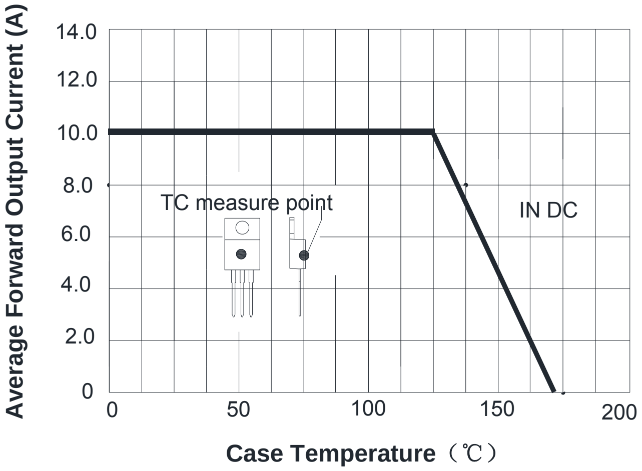


FIG2:Surge Forward Current Capability

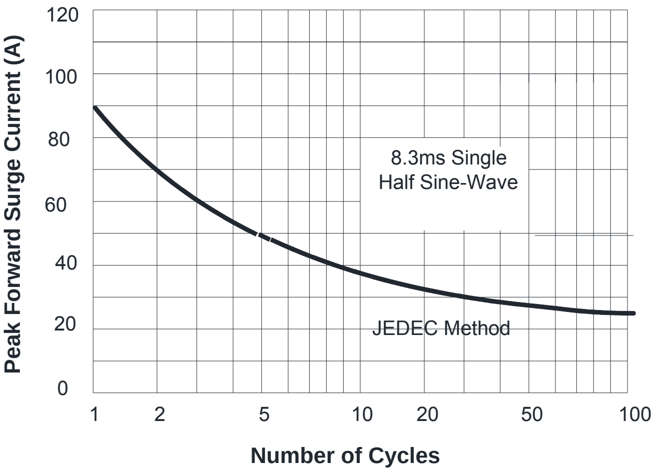
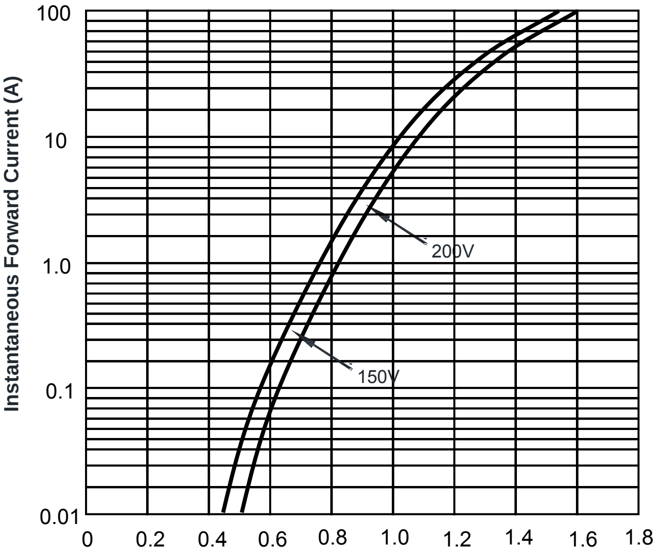


FIG3: Forward Voltage



Instantaneous Forward Voltage (V)

FIG.4: Instantaneous Reverse Characteristics