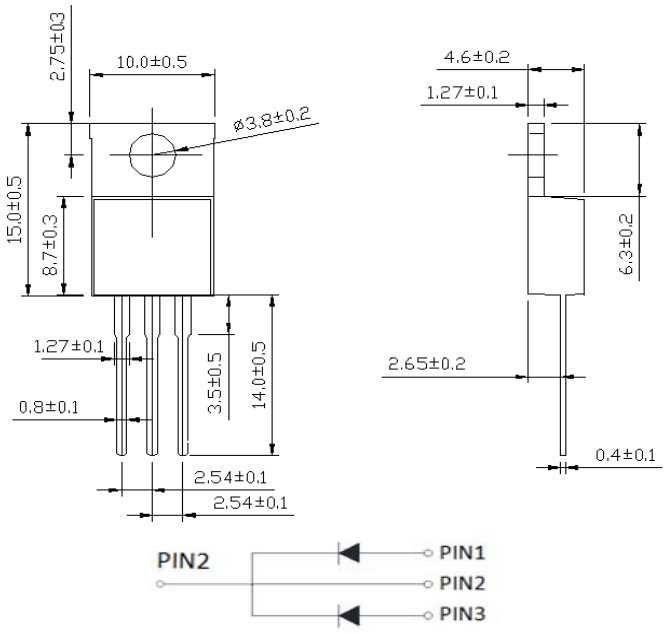
MBR30150LCT thru MBR30200LCT

30.0A Schottky Barrier Rectifiers

Rectifier Reverse Voltage 150 to 200V

TO-220AB



Dimensions in millimeters (1mm =0.0394")

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

■Maximum Ratings (Ta=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	MBR30150LCT	MBR30200LCT
Device marking code			MBR30150LCT	MBR30200LCT
Repetitive Peak Reverse Voltage	V_{RRM}	V	150	200
Average Rectified Output Current @60Hz sine wave, R-load, Ta=25℃	I_O	A	30	
Surge(Non-repetitive)Forward Current @60Hz half sine-wave, 1 cycle, Ta=25℃	I_{FSM}	A	250	
Current Squared Time @1ms≤t<8.3ms Tj=25℃,	I^2t	A^2s	259	
Storage Temperature	Tstg	℃	-55 ~ +175	
Junction Temperature	Tj	℃	-55 ~ +175	

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

PARAMETER		SYMBOL	UNIT	TEST CONDITIONS	MBR30150LCT	MBR30200LCT
Maximum instantaneous forward voltage drop per diode		V_{FM}	V	I_{FM}=15.0A	0.89	0.92
Maximum DC reverse current at rated DC blocking voltage per diode		I_{RRM1}	mA	$V_{RM}=V_{RRM}$ Ta=25℃	0.1	
		I_{RRM2}		$V_{RM}=V_{RRM}$ Ta=125℃	20	
Thermal Resistance	Between junction and case	$R_{\theta J-C}$	℃/W		2.0	

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

MBR30150LCT thru MBR30200LCT

FIG1:Io -Tc Curve

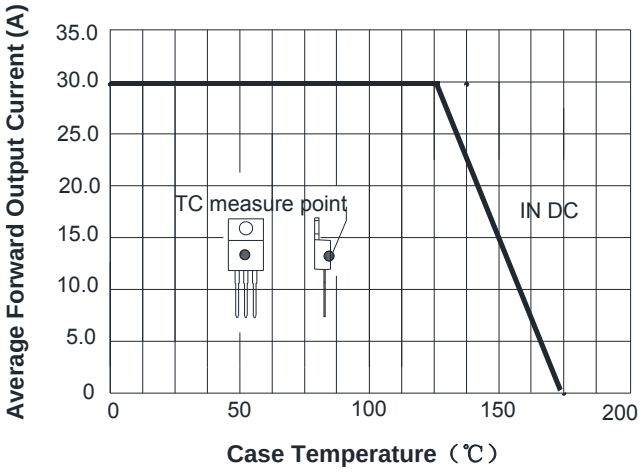


FIG2:Surge Forward Current Capability

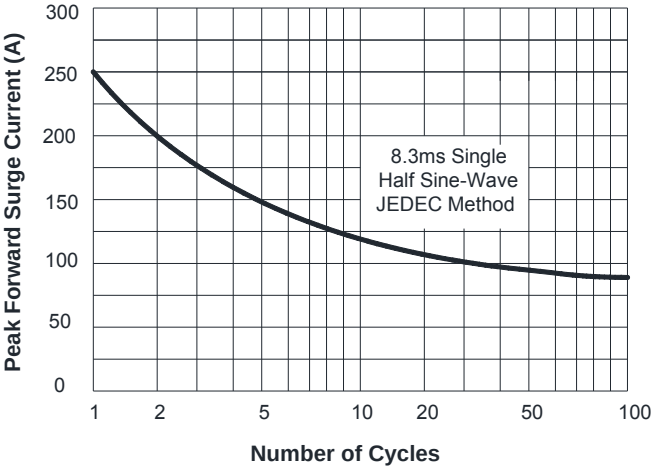


FIG3: Forward Voltage

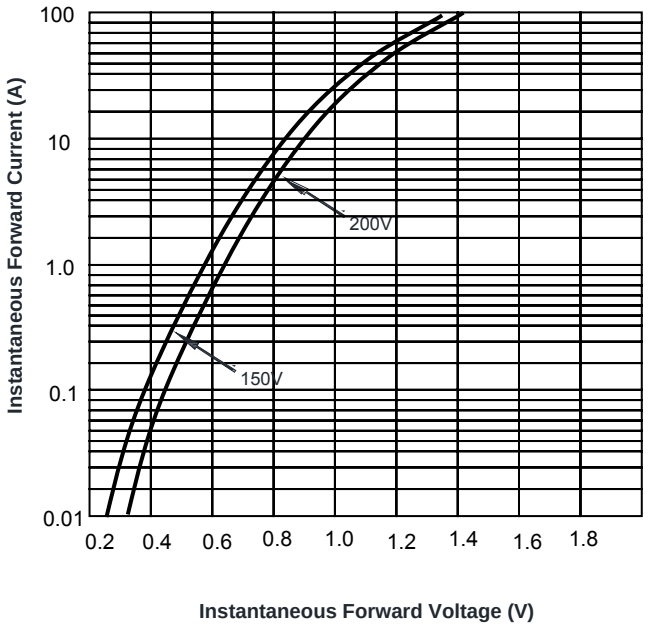


FIG.4: Instantaneous Reverse Characteristics