



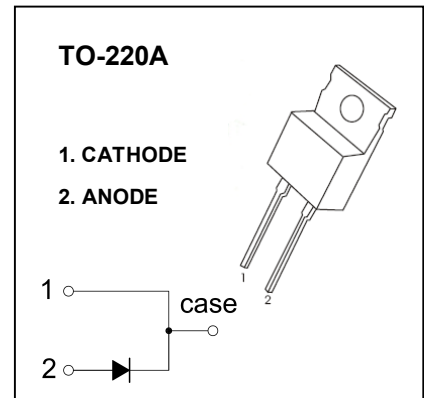
TO-220A Plastic-Encapsulate Diodes

MBR20125,150,200

SCHOTTKY BARRIER RECTIFIER

FEATURES

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- Low Power Loss,High Efficiency
- High Surge Capability
- High Current Capability and Low Forward Voltage Drop
- For Use in Low Voltage, High Frequency Inverters,Free Wheeling, and Polarity Protection Applications



MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value			Unit
		MBR20125	MBR20150	MBR20200	
V_{RRM}	Peak repetitive reverse voltage	125	150	200	V
V_{RWM}	Working peak reverse voltage				
V_R	DC blocking voltage				
$V_{R(RMS)}$	RMS reverse voltage	87.5	105	140	V
I_O	Average rectified output current	20			A
P_D	Power dissipation	2			W
$R_{\theta JA}$	Thermal resistance from junction to ambient	50			$^\circ\text{C}/\text{W}$
T_j	Junction temperature	125			$^\circ\text{C}$
T_{stg}	Storage temperature	-55~+150			$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Device	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	MBR20125	$I_R=0.1\text{mA}$	125			V
		MBR20150	$I_R=1\text{mA}$	150			
		MBR20200		200			
Reverse current	I_R	MBR20125	$V_R=125\text{V}$			9	μA
		MBR20150	$V_R=150\text{V}$			0.1	mA
		MBR20200	$V_R=200\text{V}$				
Forward voltage	$V_{F(1)}$	MBR20125	$I_F=10\text{A}$			0.87	V
		MBR20150				0.9	
		MBR20200					
	$V_{F(2)}$	MBR20125	$I_F=20\text{A}$			1	
		MBR20150					
		MBR20200					