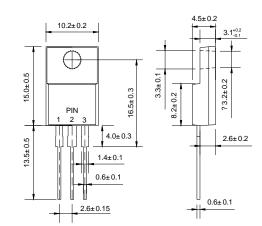


# MBRF20150CT-MBR20200CT

Schottky Barrier Rectifiers

Reverse Voltage: 150---200V Forward Current: 20A

### **ITO-220AB**



**Dimensions in millimeters** 

### **Features**

- ♦ Metal-Semiconductor junction with guard ring
- Epitaxial construction
- ♦ Low forward voltage drop, low swithing losses
- ♦ High surge capacity
- ❖ For use in low voltage, high frequency inverters free wheeling, and polarity protection applications
- ♦ The plastic material carries U/L recognition 94V-0

## **Mechanical Data**

Case: JEDEC ITO-220AB, molded plastic body

→ Polarity: As marked
→ Mounting Position: Any
→ Weight: 0.08 ounce, 2.24 grams

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbol	MBRF20150CT	MBRF20200CT	UNITS
		WIBINI 20130C1	WIBINI 20200CT	Oitiro
Maximum recurrent peak reverse voltage	$V_{RRM}$	150	200	V
Maximum RMS voltage	V <sub>RWS</sub>	135	140	V
Maximum DC blocking voltage	V <sub>DC</sub>	150	200	V
Maximum average forward tolal device rectified current @T <sub>C</sub> =100°C	I <sub>(AV)</sub>	20		А
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	150		А
Maximum instantaneous forward voltage @10A	V <sub>F</sub>	0.95		V
Maximum reverse current @T <sub>A</sub> =25°C at rated DC blocking voltage @T <sub>A</sub> =100°C	I <sub>R</sub>	0.2		mA
		50		
Maximum thermal resistance (Note1)	$R_{\theta JC}$	1.5		°C/W
Operating junction temperature range	$T_J$	-55 +150		°C
Storage temperature range	T <sub>STG</sub>	-55 +150		°C

**NOTES:** 1. Thermal resistance from junction to case.

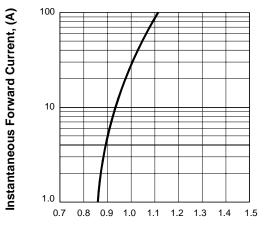


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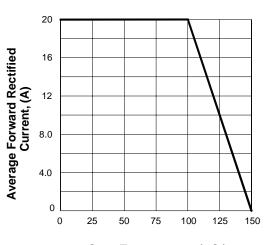
# **Ratings AND Charactieristic Curves**

### FIG.1 TYPICAL FORWARD CHARACTERISTICS



Instantaneous Forward Voltage, (V)

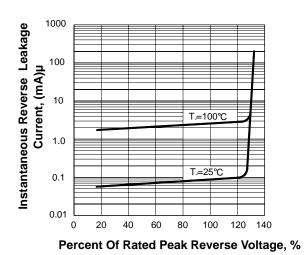
### FIG.2 FORWARD DERATING CURVE



Case Temperature, (°C)

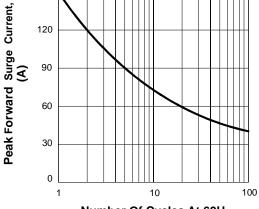
FIG.4 PEAK FORWARD SURGE CURRENT

### FIG.3 TYPICAL REVERSE CHARACTERISTICS



150

120



Number Of Cycles At 60Hz