



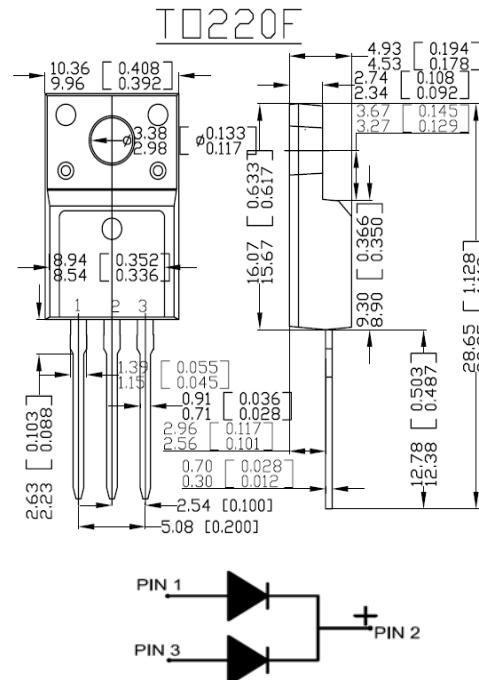
SHENZHEN HAOLIN ELECTRONICS TECHNOLOGY CO., LTD

## TO-220F SCHOTTKY BARRIER RECTIFIERS

## MBR20150CT

## 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

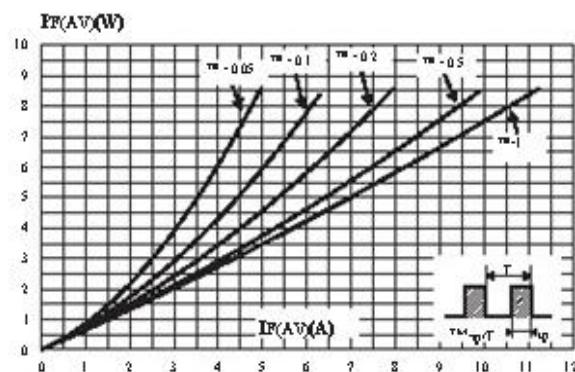


Dimensions in millimeters and (inches)

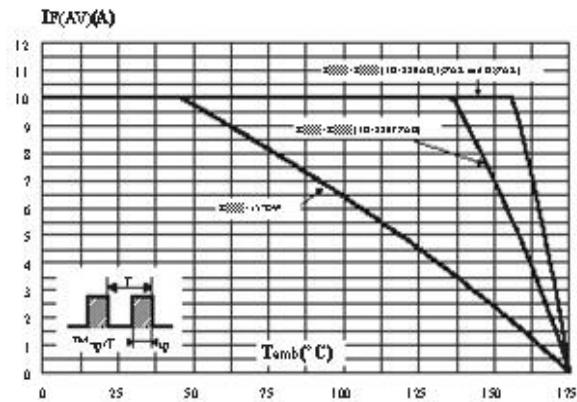
## ELECTRICAL CHARACTERISTICS (Tamb=25°C)

Characteristic	Symbol	MBR20150CT	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>		
Working Peak Reverse Voltage	V <sub>RWM</sub>	150	V
DC Blocking Voltage	V <sub>R</sub>		
Average Rectified Output Current	I <sub>c</sub>	20	A
Maximum Instantaneous Forward Voltage @ I <sub>F</sub> = 10A, T <sub>c</sub> = 25°C @ I <sub>F</sub> = 10A, T <sub>c</sub> = 125°C @ I <sub>F</sub> = 20A, T <sub>c</sub> = 25°C @ I <sub>F</sub> = 20A, T <sub>c</sub> = 125°C	V <sub>F</sub>	0.85 0.82 0.95 0.85	V
Peak Reverse Current @ T <sub>c</sub> = 25°C at Rated DC Blocking Voltage @ T <sub>c</sub> = 125°C	I <sub>R</sub>	50 200	uA
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>stg</sub>	-55 to +150	°C

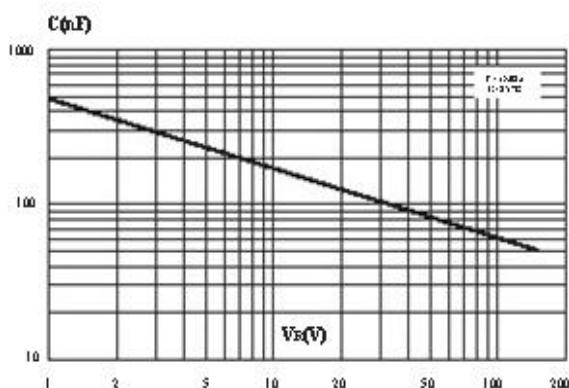
**Fig. 1:** Average forward power dissipation versus average forward current (per diode).



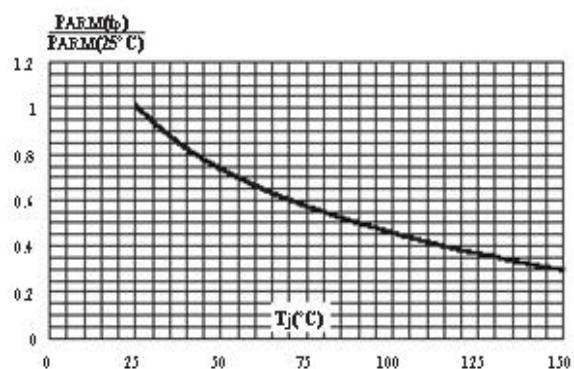
**Fig. 2:** Average forward current versus ambient temperature ( $\delta = 0.5$ , per diode).



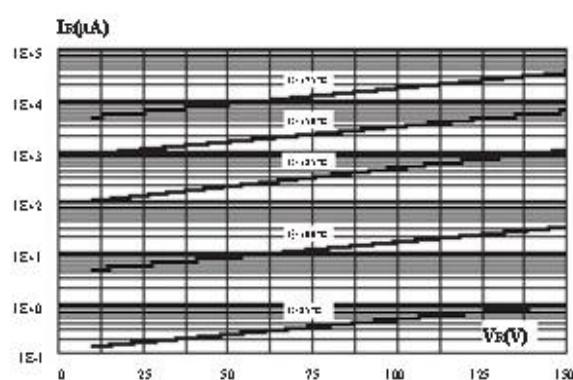
**Fig. 3:** Junction capacitance versus reverse voltage applied (typical values, per diode).



**Fig. 4:** Normalized avalanche power derating versus junction temperature.



**Fig. 5 :** Reverse leakage current versus reverse voltage applied (typical values, per diode).



**Fig. 6:** Non repetitive surge peak forward current versus overload duration (maximum values, per diode).

