



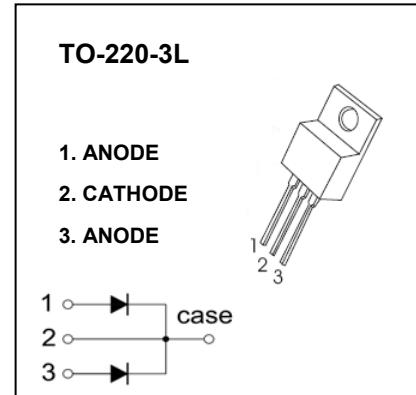
SHENZHEN HAOLIN ELECTRONICS TECHNOLOGY CO., LTD

## TO- 220 SCHOTT KY BARRIER RECTIFIERS

### MBR2045CT

#### 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



#### ELECTRICAL CHARACTERISTICS (Tamb=25°C)

Characteristic	Symbol	MBR2045CT	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>		
Working Peak Reverse Voltage	V <sub>RWM</sub>	45	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>	0.7 0.65 0.75 0.68	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>	10 200	uA
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>stg</sub>	-55 to +150	°C

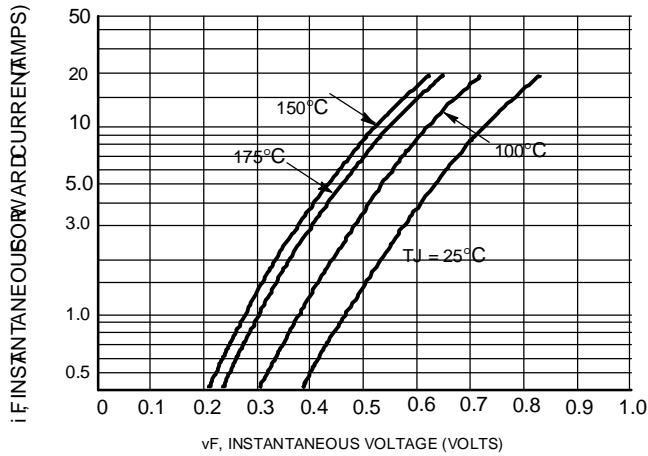


Figure 1. Typical Forward Voltage Per Diode

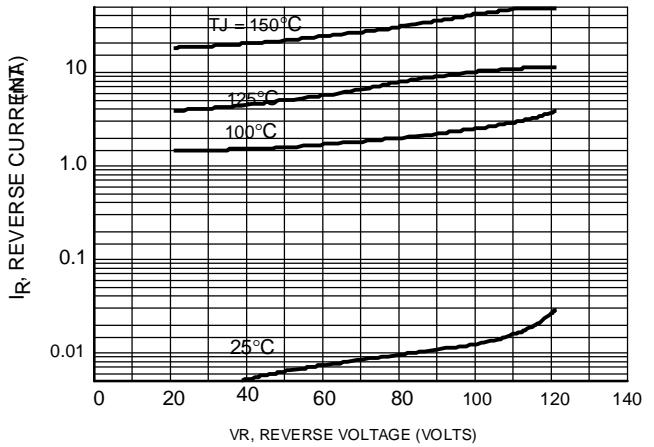


Figure 2. Typical Reverse Current Per Diode

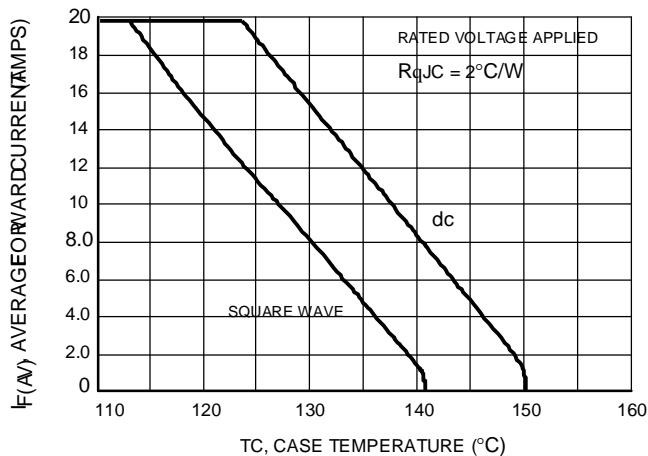


Figure 3. Current Derating, Case

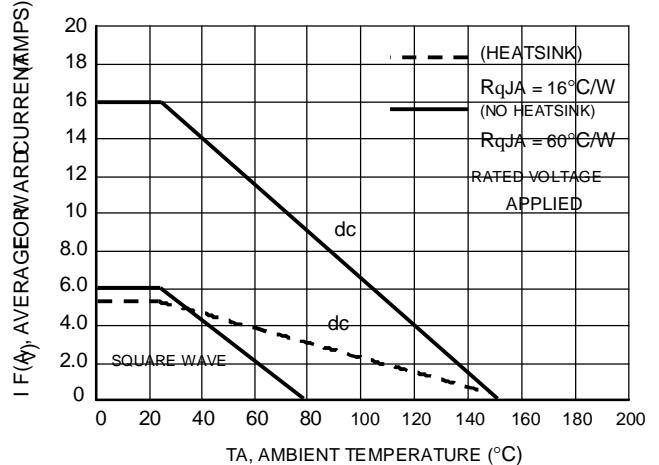


Figure 4. Current Derating, Ambient

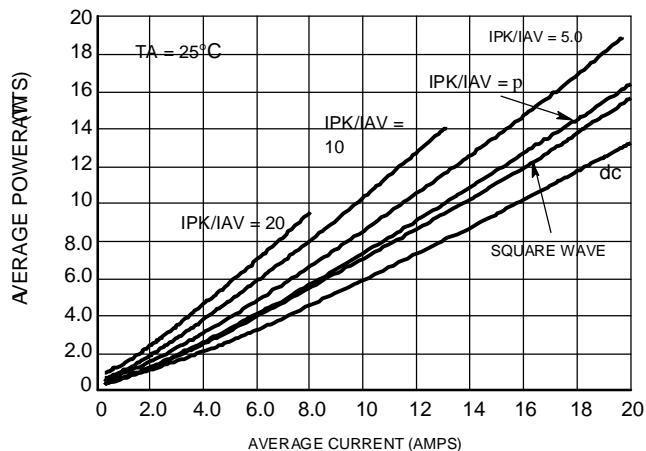


Figure 5. Average Power Dissipation and Average Current