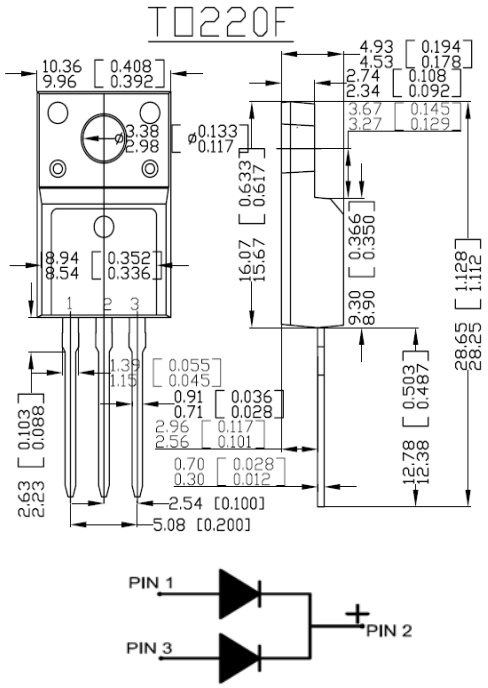
SHENZHEN HAOLIN ELECTRONICS TECHNOLOGY CO., LTD

TO- 220F SCHOTTKY BARRIER RECTIFIERS

MBR1045CT



Dimensions in millimeters and (inches)

FEATURES

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- Low Power Loss,High Effciency
- 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^{0}C)

Characteristic	Symbol	MBR1040CT	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	45	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
Average Rectifide Output Current	I_C	10	A
Maximum Instaneous Forward Voltage			
@I_F =10A,Tc=25 ^{0}C	V_F	0.65	V
@I_F =10A,Tc=125 ^{0}C		0.7	
@I_F =20A,Tc=25 ^{0}C		0.75	
@I_F =20A,Tc=125 ^{0}C		0.65	
Peak Reverse Current @Tc=25 ^{0}C	I_R	10	uA
at Rated DC Blocking Voltage @Tc=125 ^{0}C		200	
Operating and Storage Temperature Range	T_j ,T_{stg}	-55 to +150	^{0}C

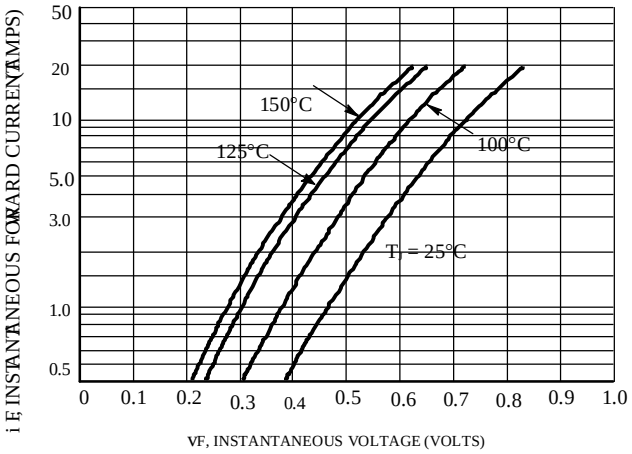


Figure 1. Typical Forward Voltage

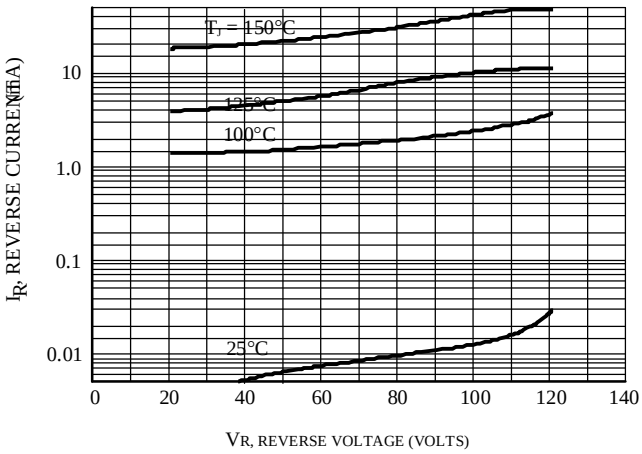


Figure 2. Typical Reverse Current

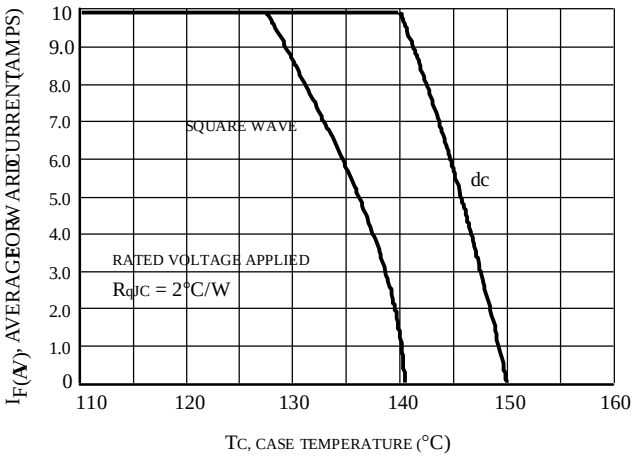


Figure 3. Current Derating, Case

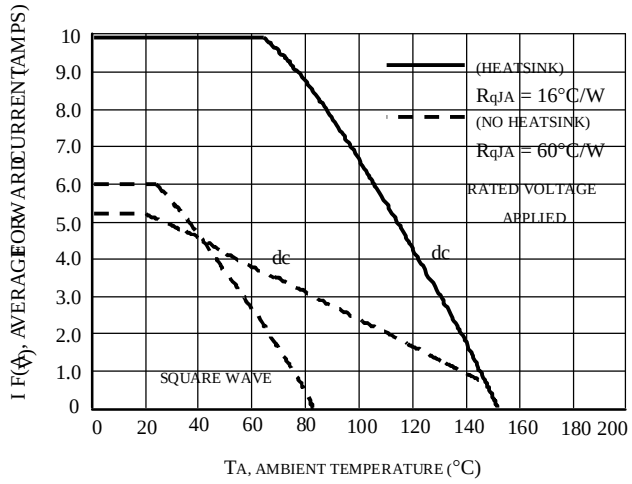


Figure 4. Current Derating, Ambient

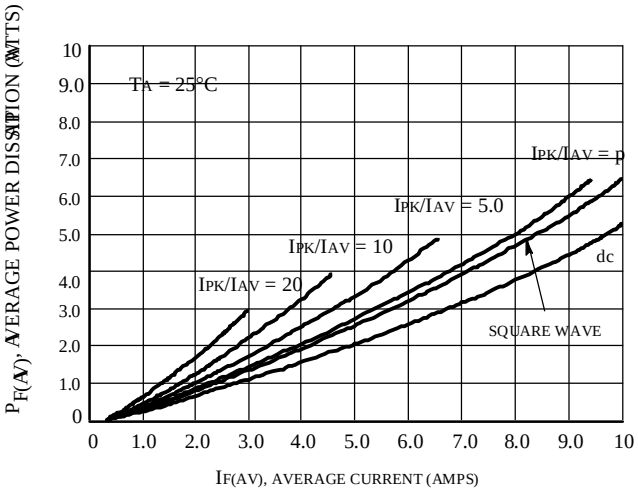


Figure 5. Forward Power Dissipation