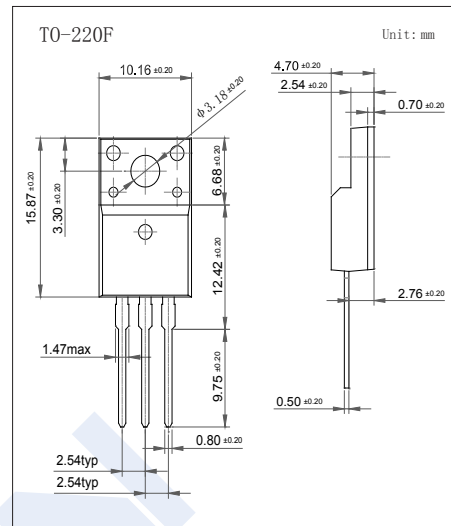
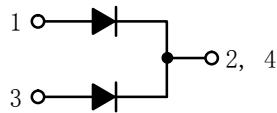


## Schottky Barrier Diodes

## MBR20100F

## ■ Features

- LOW VF.
- High Operating Junction Temperature.
- High Switching Speed.
- High Reliability.

■ Absolute Maximum Ratings  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Rating	Unit
DC Blocking Voltage @ $I_r=0.2\text{mA}$	$V_{RRM}$	100	V
DC Forward Current	$I_{F(AV)}$	10	A
Peak forward surge current	$I_{FSM}$	150	
Junction Temperature	$T_J$	175	$^\circ\text{C}$
Storage temperature range	$T_{stg}$	-55 to 150	

■ Electrical Characteristics  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_{RM}$	$I_R = 0.2 \text{ mA}$	100			V
Forward voltage	$V_F$	$I_F = 10 \text{ A}, T_c = 25^\circ\text{C}$ (Note.1)			850	mV
Reverse voltage leakage current	$I_R$	$V_R = 100\text{V}, T_c = 25^\circ\text{C}$ (Note.1)			10	$\mu\text{A}$

Note.1: Pulse Test: Pulse Width = 300  $\mu\text{s}$ , Duty Cycle  $\leq 2.0\%$ .

# Schottky Barrier Diodes

## MBR20100F

### Typical Characteristics

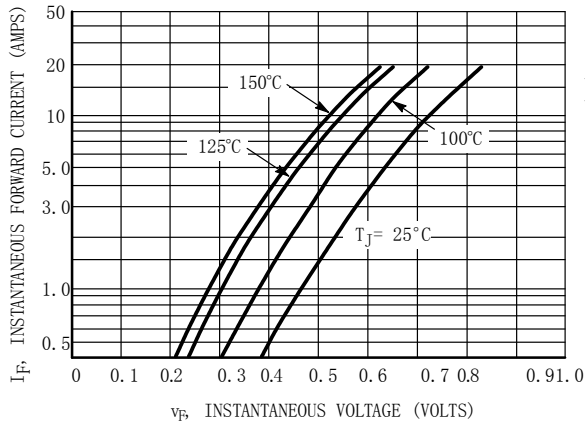


Figure 1. Typical Forward Voltage Per Diode

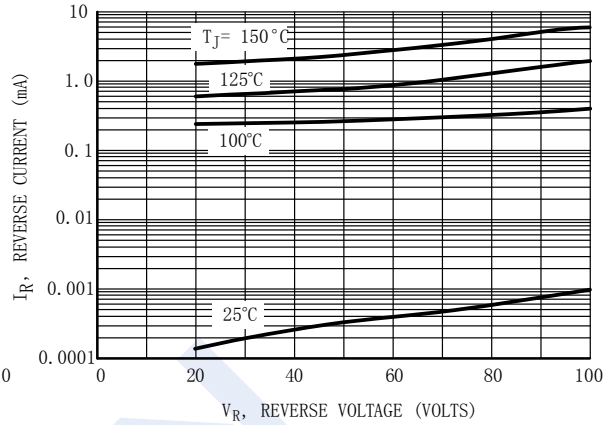


Figure 2. Typical Reverse Current Per Diode

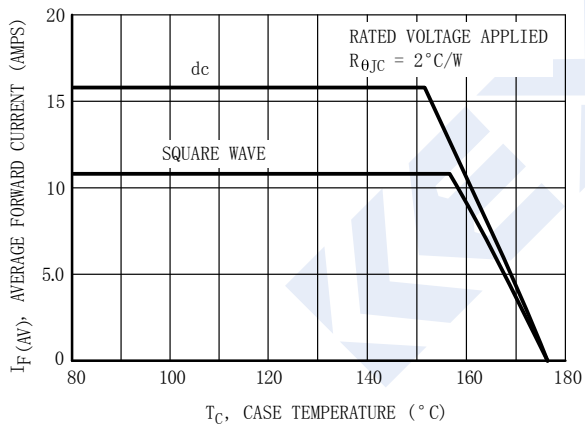


Figure 3. Typical Current Derating, Case, Per Leg

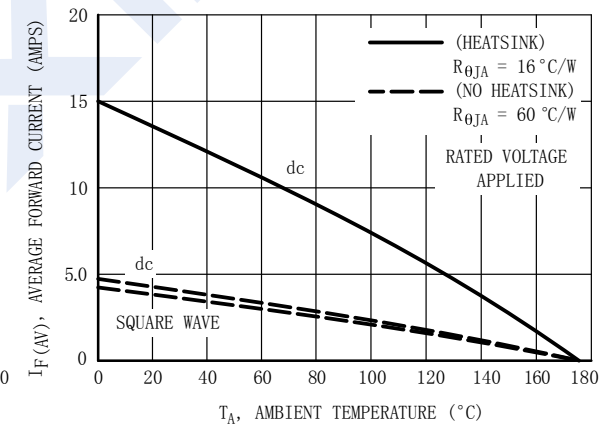


Figure 4. Typical Current Derating, Ambient, Per Leg

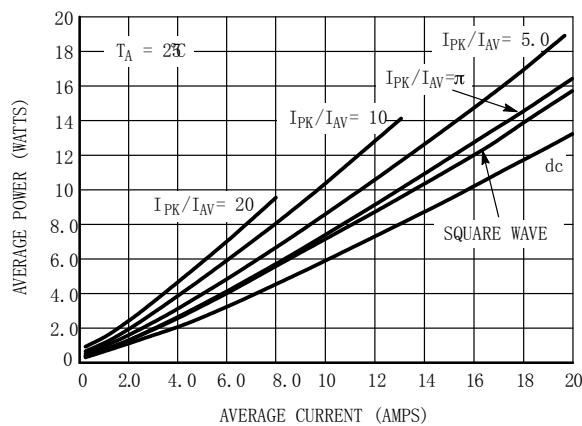


Figure 5. Average Power Dissipation and Average Current