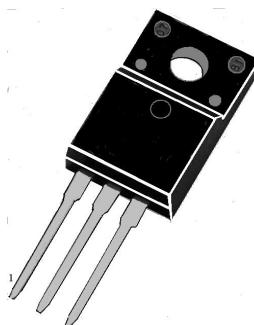
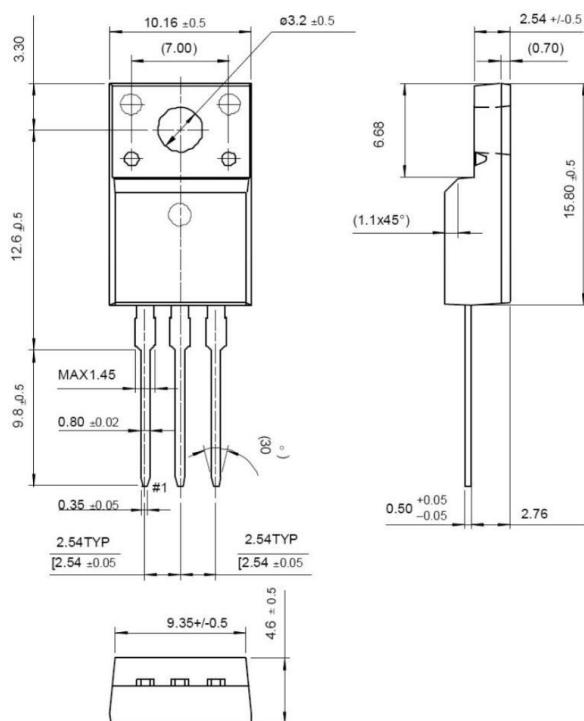
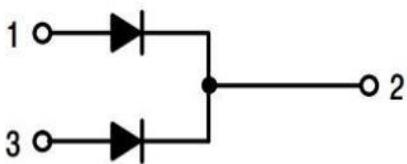


**◆ Features:**

- ◇ High switching frequency  
开关频率高
- ◇ Low forward voltage drop  
正向压降低
- ◇ High efficiency and low power loss  
高效低功耗
- ◇ High volume of current and good capability of surge current  
大电流浪涌能力强

**TO-220F****◆ Applications**

- ◇ High frequency rectifier of switching mode power supplies  
高频整流器开关电源
- ◇ Freewheeling diodes  
续流二极管
- ◇ Polarity protection application  
极性保护应用
- ◇ DC-DC converters  
直流-直流变换器

**PIN CONNECTIONS**



MBRF10100DT

Power Schottky Rectifier - 10Amp 100Volt

### ◆ Absolute Maximum Ratings (Tc=25°C)

Symbol	Parameters	Ratings	Unit
V <sub>RRM</sub>	Repetitive Peak Reverse Voltage 最大反向重复峰值电压	100	V
V <sub>RWM</sub>	Working peak reverse voltage 反向峰值工作电压	100	V
V <sub>R</sub>	Maximum DC blocking voltage 最大直流反向电压	100	V
I <sub>F (AV)</sub>	Maximum average forward rectified current Total device 最大正向平均电流	10	A
I <sub>FSM</sub>	Peak Forward Surge Current 正向峰值浪涌电流	120	A
T <sub>j</sub>	Operating junction temperature range 结温	-65~150	°C
T <sub>stg</sub>	Storage temperature range 贮存温度	-65~175	°C

### ◆ Electrical characteristics

Symbol	Parameters	Min	Typical	Max	Units	Conditions
I <sub>R</sub>	Maximum Reverse Leakage Current (Note 1) 最大反向瞬态电流	--	--	0.1 50	mA	V <sub>R</sub> =V <sub>RRM</sub> T <sub>C</sub> = 25 °C T <sub>C</sub> = 125 °C
V <sub>F</sub>	Maximum Instantaneous Forward Voltage (Note 2) 最大瞬态正向压降	--	--	0.85 0.75 0.95 0.85	V	I <sub>F</sub> = 5 A, T <sub>C</sub> = 25 °C I <sub>F</sub> = 5 A, T <sub>C</sub> = 125 °C I <sub>F</sub> = 10A, T <sub>C</sub> = 25 °C I <sub>F</sub> = 10 A, T <sub>C</sub> = 125 °C
R <sub>th(j-c)</sub>	Typical Thermal Resistance,Junction to Case 结到外壳的典型热阻	--	--	3.0	°C/W	
dV/dt	Voltage Rate of Change 电压变化率	--	--	10000	V/μs	

Note 1: 2.0uS Pulse Width, f=1.0KHz

Note 2: Pulse Test : 300us Pulse Width, 1% Duty Cycle

## ◆ Ratings and Characteristic curves

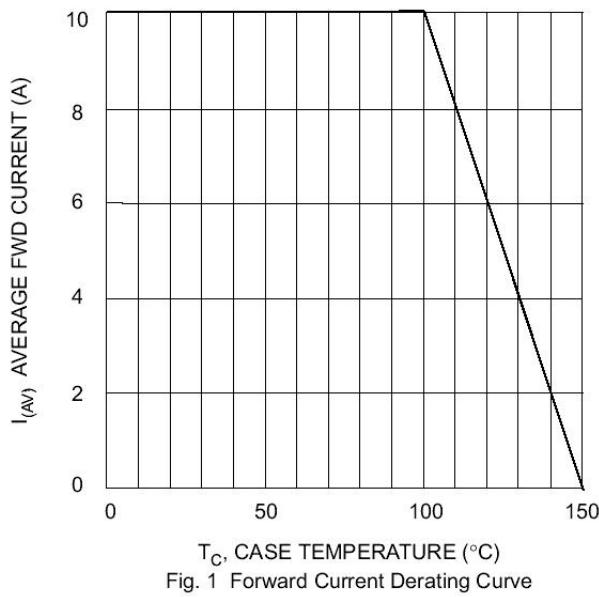


Fig. 1 Forward Current Derating Curve

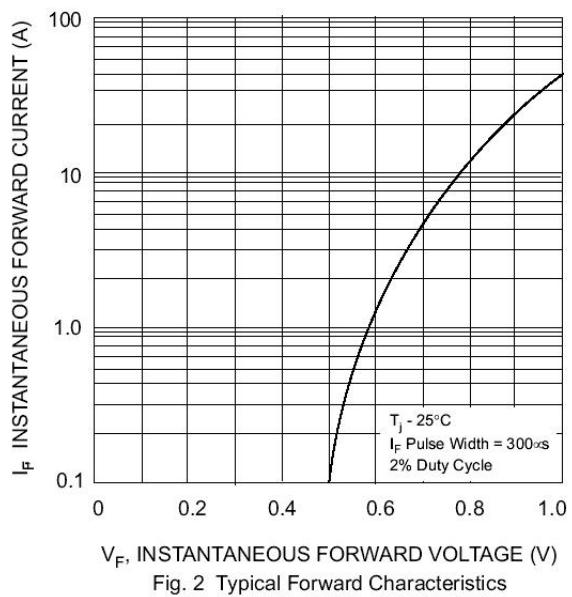


Fig. 2 Typical Forward Characteristics

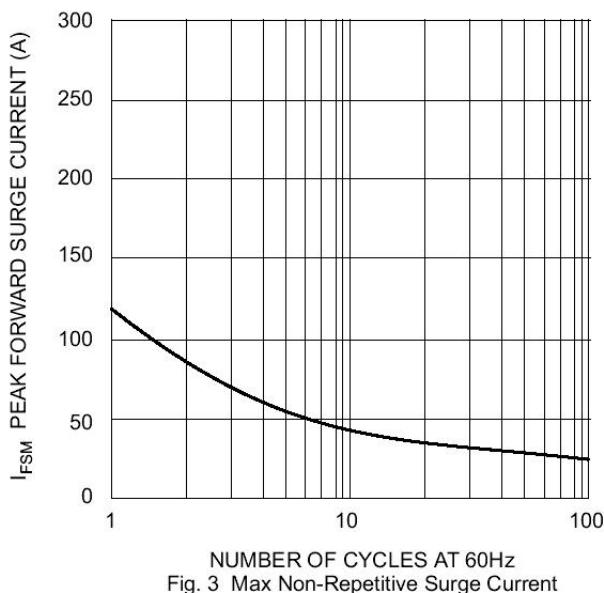


Fig. 3 Max Non-Repetitive Surge Current

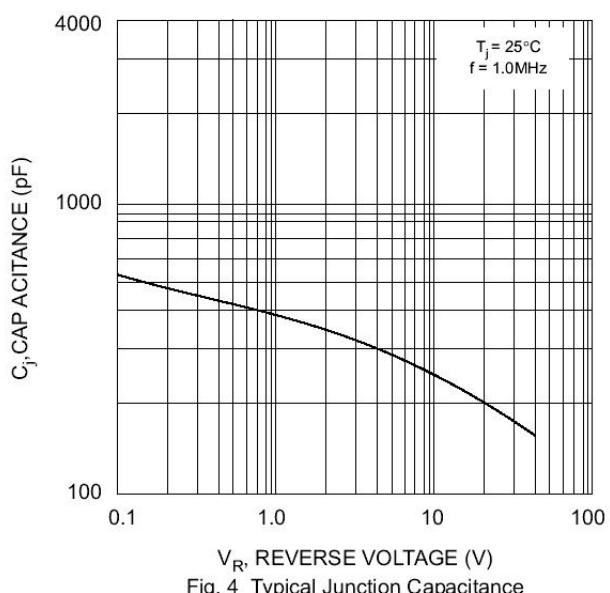


Fig. 4 Typical Junction Capacitance