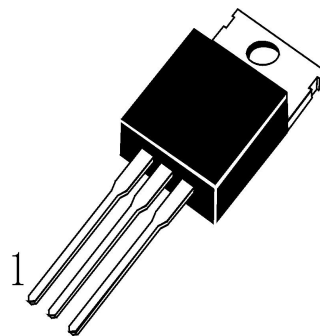


### ◆ Features:

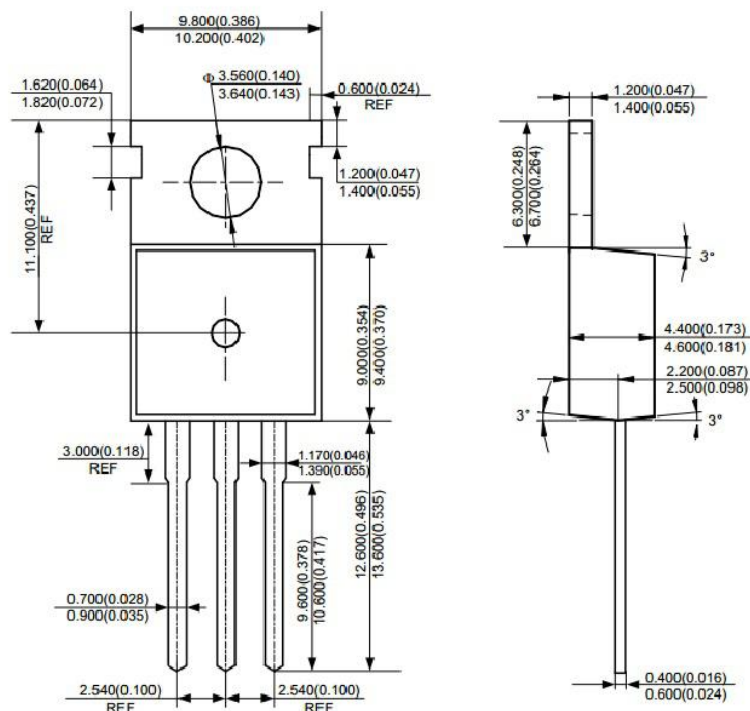
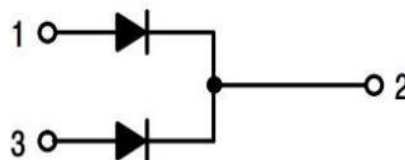
- ✧ High switching frequency  
开关频率高
- ✧ Low forward voltage drop  
正向压降低
- ✧ High efficiency and low power loss  
高效低功耗
- ✧ High volume of current and good capability of surge current  
大电流浪涌能力强

### ◆ 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


**TO-220**


### PIN CONNECTIONS



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

Symbol	Parameters	Ratings	Unit
$V_{RRM}$	Repetitive Peak Reverse Voltage 最大反向重复峰值电压	<b>100</b>	V
$V_{RWM}$	Working peak reverse voltage 反向峰值工作电压	<b>100</b>	V
$V_R$	Maximum DC blocking voltage 最大直流反向电压	<b>100</b>	V
$I_F (AV)$	Maximum average forward rectified current Total device 最大正向平均电流	<b>30</b>	A
$I_{FSM}$	Peak Forward Surge Current 正向峰值浪涌电流	<b>400</b>	A
$T_j$	Operating junction temperature range 结温	<b>-65~150</b>	°C
$T_{stg}$	Storage temperature range 贮存温度	<b>-65~175</b>	°C

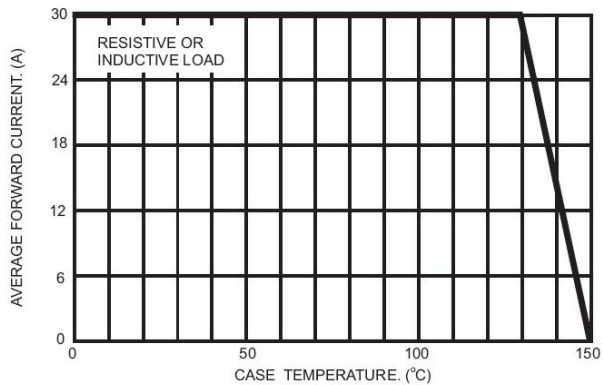
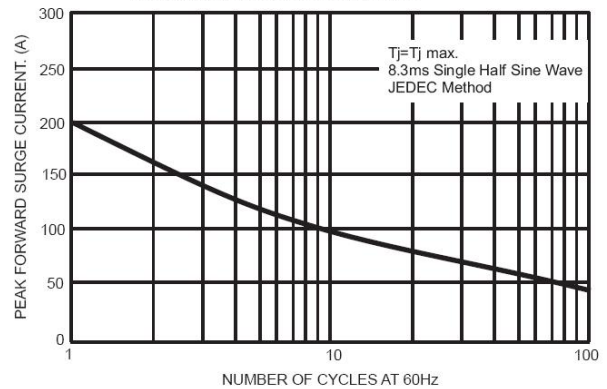
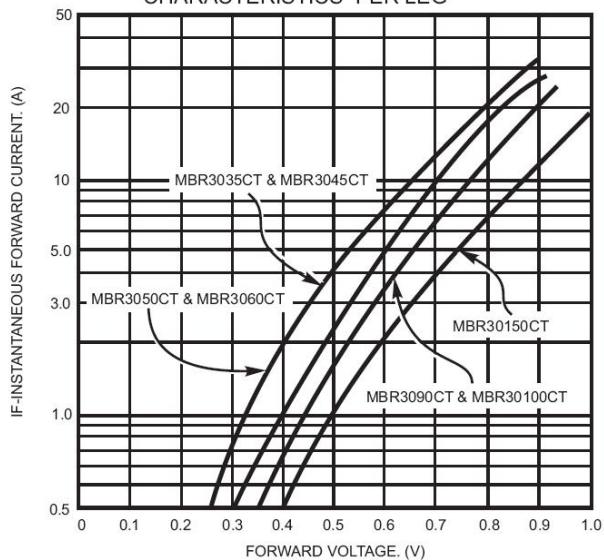
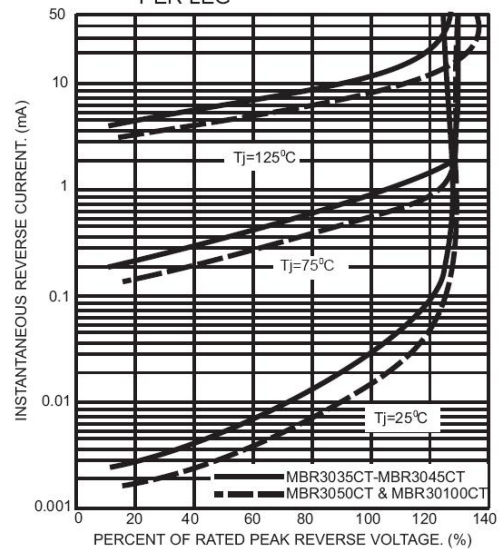
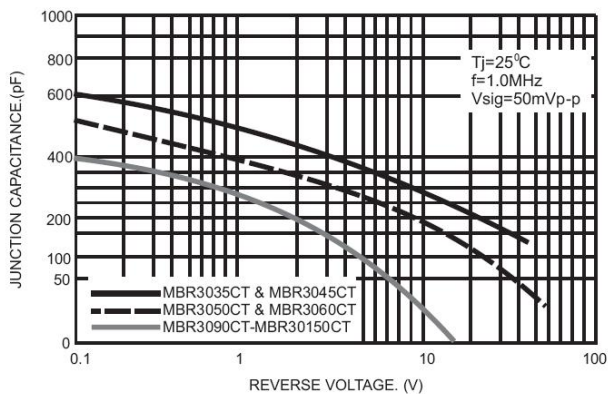
### ◆ Electrical characteristics

Symbol	Parameters	Min	Typical	Max	Units	Conditions
$I_R$	Maximum Reverse Leakage Current (Note 1) 最大反向瞬态电流	--	--	<b>5</b> <b>100</b>	mA	$V_R = V_{RRM}$ $T_C = 25\text{ }^{\circ}\text{C}$ $T_C = 125\text{ }^{\circ}\text{C}$
$V_F$	Maximum Instantaneous Forward Voltage (Note 2) 最大瞬态正向压降	--	--	<b>0.85</b>	V	$I_F = 30\text{ A}$ , $T_C = 25\text{ }^{\circ}\text{C}$
$R_{th(j-c)}$	Typical Thermal Resistance, Junction to Case 结到外壳的典型热阻	--	--	<b>1.5</b>	°C/W	
$dV/dt$	Voltage Rate of Change 电压变化率	--	--	<b>10000</b>	V/ $\mu$ s	

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- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG**

**FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG**

**FIG.4- TYPICAL REVERSE CHARACTERISTICS PER LEG**

**FIG.5- TYPICAL JUNCTION CAPACITANCE PER LEG**

**FIG.6- TYPICAL TRANSIENT THERMAL IMPEDANCE PER LEG**
