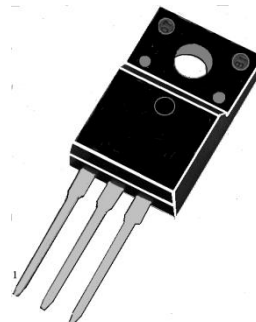


### ◆ Features:

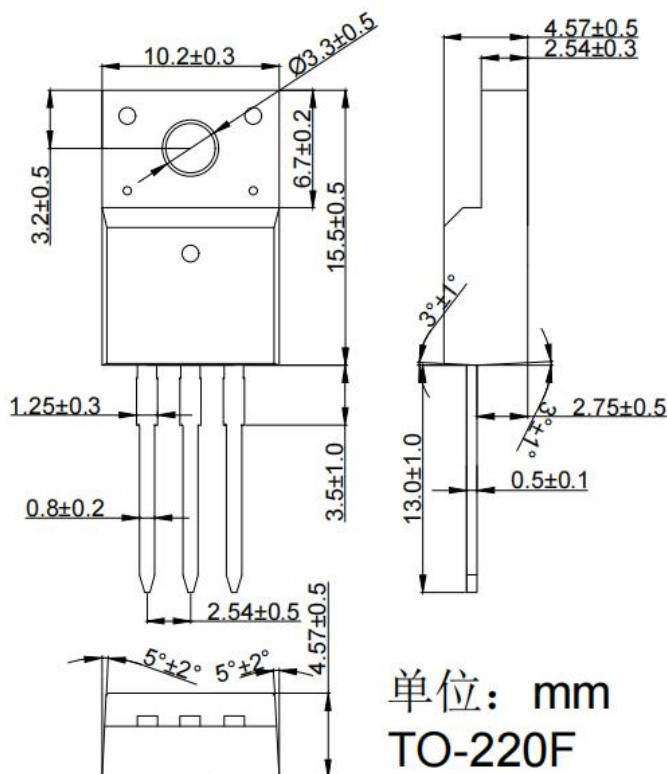
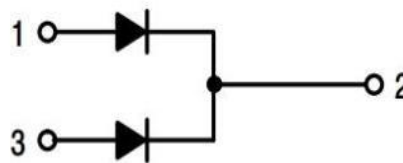
- ✧ High switching frequency  
开关频率高
- ✧ Low forward voltage drop  
正向压降低
- ✧ High efficiency and low power loss  
高效低功耗
- ✧ High volume of current and good capability of surge current  
大电流浪涌能力强

### ◆ 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-220F**


### PIN CONNECTIONS



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

| Symbol     | Parameters                                                         | Ratings | Unit |
|------------|--------------------------------------------------------------------|---------|------|
| $V_{RRM}$  | Repetitive Peak Reverse Voltage<br>最大反向重复峰值电压                      | 100     | V    |
| $V_{RWM}$  | Working peak reverse voltage<br>反向峰值工作电压                           | 100     | V    |
| $V_R$      | Maximum DC blocking voltage<br>最大直流反向电压                            | 100     | V    |
| $I_F (AV)$ | Maximum average forward rectified current Total device<br>最大正向平均电流 | 40      | A    |
| $I_{FSM}$  | Peak Forward Surge Current<br>正向峰值浪涌电流                             | 300     | A    |
| $T_j$      | Operating junction temperature range<br>结温                         | 175     | °C   |
| $T_{stg}$  | Storage temperature range<br>贮存温度                                  | -55~175 | °C   |

## ◆ Electrical characteristics

| Symbol        | Parameters                                                 | Min | Typical | Max   | Units | Conditions                                              |
|---------------|------------------------------------------------------------|-----|---------|-------|-------|---------------------------------------------------------|
| $I_R$         | Maximum Reverse Leakage Current (Note 1)<br>最大反向瞬态电流       | --  | --      | 80    | uA    | $V_R = V_{RRM}$<br>$T_C = 25\text{ }^{\circ}\text{C}$   |
| $V_F$         | Maximum Instantaneous Forward Voltage (Note 2)<br>最大瞬态正向压降 | --  | 0.52    | 0.59  | V     | $I_F = 10\text{A}$ , $T_C = 25\text{ }^{\circ}\text{C}$ |
| $R_{th(j-c)}$ | Typical Thermal Resistance, Junction to Case<br>结到外壳的典型热阻  | --  | --      | 0.5   | °C/W  |                                                         |
| dV/dt         | Voltage Rate of Change<br>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