

## 塑封快恢复整流二极管

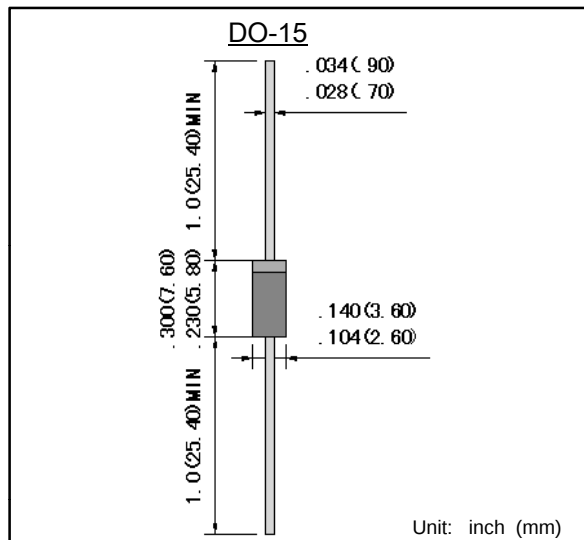
反向电压 50 ~ 1000 V

正向电流 2.0 A

## Plastic Fast Recovery Rectifiers

Reverse Voltage 50 ~ 1000 V

Forward Current 2.0 A



### 特征 Features

- 反向漏电流低 Low reverse leakage
- 正向浪涌承受能力强 High forward surge capability
- 高信赖性 High reliability
- 高温焊接保证 High temperature soldering guaranteed:  
260°C/10 秒, 引线长度:0.375" (9.5mm)  
260°C/10seconds, 9.5mm lead length
- 引线 and 管体皆符合RoHS标准  
Lead and body according with RoHS standard
- 型号后缀“-F”标记无卤素产品  
Green compound with suffix "-F" on Marking

### 机械数据 Mechanical Data

- 封装外形:DO-15 塑封 Case:DO-15 Molded plastic
- 环氧树脂:UL易燃等级:94V-0  
Epoxy: UL 94V-0 rate flame retardant
- 引脚:镀锡,无铅 Lead: Pure tin plated, lead free

**最大值和特性** TA = 25°C 除非另有规定。

### Maximum Ratings & Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

| Maximum Ratings & Characteristics                                                                  |                                   |              |           |           |           |           |           |           |            |
|----------------------------------------------------------------------------------------------------|-----------------------------------|--------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| 参数<br>Parameter                                                                                    | 符号<br>Symbols                     | FR<br>201    | FR<br>202 | FR<br>203 | FR<br>204 | FR<br>205 | FR<br>206 | FR<br>207 | 单位<br>Unit |
| 最大可重复峰值反向电压<br>Maximum repetitive peak reverse voltage                                             | V <sub>RRM</sub>                  | 50           | 100       | 200       | 400       | 600       | 800       | 1000      | V          |
| 最大均方根电压 Maximum RMS voltage                                                                        | V <sub>RMS</sub>                  | 35           | 70        | 140       | 280       | 420       | 560       | 700       | V          |
| 最大直流阻断电压<br>Maximum DC blocking voltage                                                            | V <sub>DC</sub>                   | 50           | 100       | 200       | 400       | 600       | 800       | 1000      | V          |
| 最大正向平均整流电流<br>Maximum average forward rectified current                                            | I <sub>F(AV)</sub>                | 2.0          |           |           |           |           |           |           | A          |
| 正向不重复浪涌电流 8.3 ms单一正弦半波<br>Non-repetitive peak forward surge current<br>8.3 ms singlehalf sine-wave | I <sub>FSM</sub>                  | 60           |           |           |           |           |           |           | A          |
| 最大正向电压 @IF=1.0A<br>Maximum forward voltage                                                         | V <sub>F</sub>                    | 1.3          |           |           |           |           |           |           | V          |
| 最大反向电流 @V <sub>DC</sub> TA= 25℃<br>Maximum reverse current TA= 100℃                                | I <sub>R</sub>                    | 5<br>100     |           |           |           |           |           |           | μA         |
| 最大反向恢复时间 IF=0.5A , IR=1.0A ,IRR=0.25A<br>MAX. reverse recovery time                                | T <sub>rr</sub>                   | 150          |           |           |           |           | 300       |           | ns         |
| 典型热阻 Typical thermal resistance (Note 1)                                                           | RθJA                              | 60           |           |           |           |           |           |           | ℃/W        |
| 典型结电容 VR=4.0V,f=1MHz<br>Type junction capacitance                                                  | C <sub>j</sub>                    | 25           |           |           |           |           |           |           | pF         |
| 工作结温和存储温度<br>Operating junction and storage temperature rang                                       | T <sub>j</sub> , T <sub>STG</sub> | -55 --- +150 |           |           |           |           |           |           | ℃          |

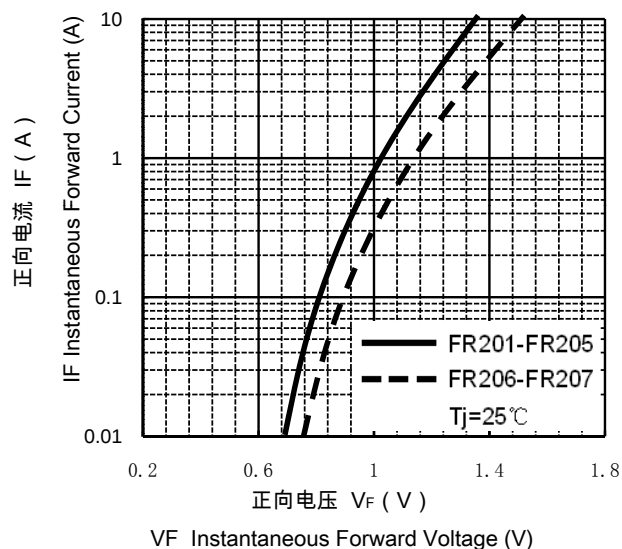
备注 Note:

1) 引线长度 0.375" (9.5 mm), 安装在PCB板上, 从PN结到周围环境的热阻。

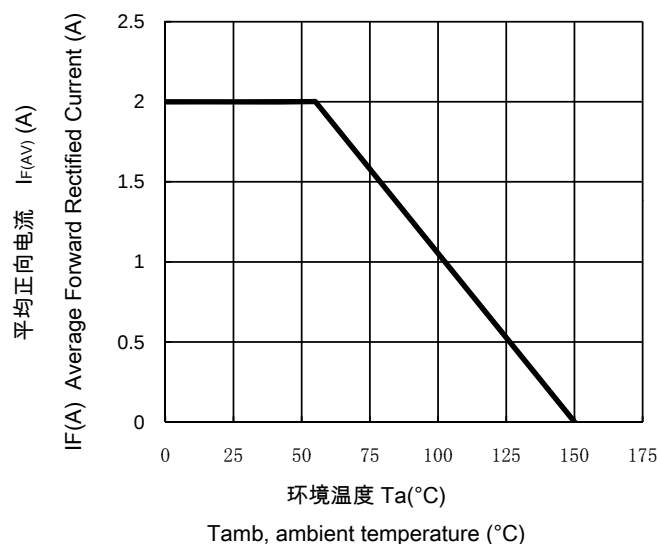
1) Thermal resistance from junction to ambient at 0.375" (9.5 mm) lead length, PCB mounted.

## 特性曲线 Characteristic Curves

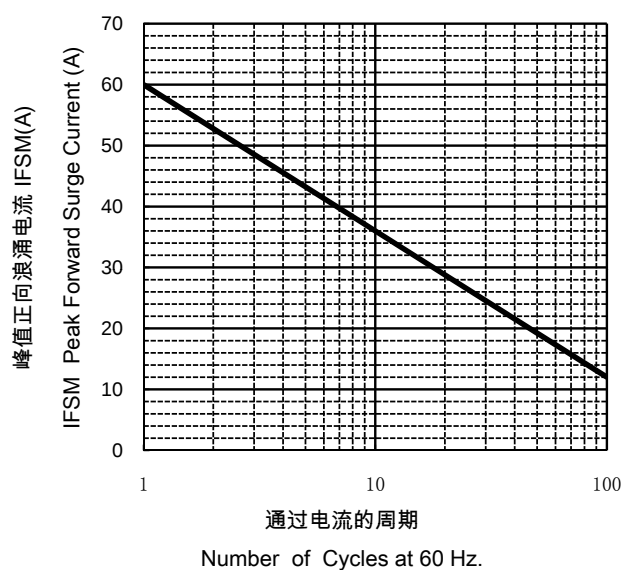
正向特性曲线 (典型值)  
TYPICAL FORWARD CHARACTERISTIC



正向电流降额曲线  
FORWARD CURRENT DERATING CURVE



浪涌特性曲线 (最大值)  
MAXIMUM NON REPETITIVE  
PEAK FORWARD SURGE CURRENT



反向特性曲线  
Typical Reverse Characteristics

