

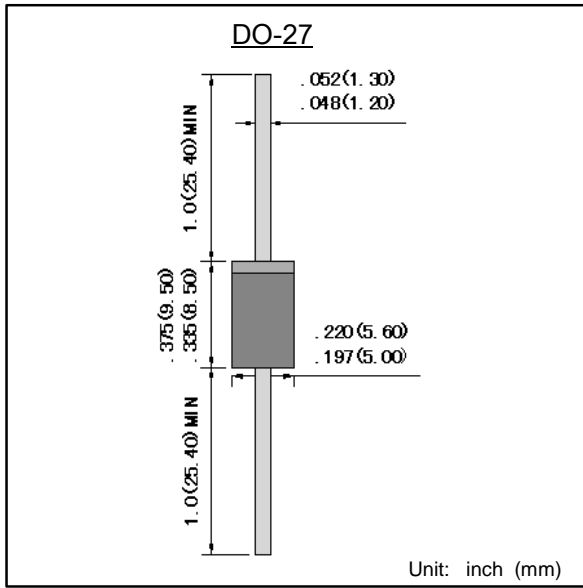


## 塑封肖特基二极管

反向电压 100 V  
正向电流 5.0 A

## Schottky Barrier Plastic Rectifiers

Reverse Voltage 100 V  
Forward Current 5.0 A



### 特征 Features

- 沟槽工艺 Trench schottky technology
- 正向压降低 Low forward voltage
- 反向漏电流低 Low reverse leakage
- 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-27 塑封 Case:DO-27 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

### 极限值和温度特性 TA = 25°C 除非另有规定。 Maximum Ratings & Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

参数 Parameter	符号 Symbols	TB5100	单位 Unit
最大可重复峰值反向电压 Maximum repetitive peak reverse voltage	$V_{RRM}$	100	V
最大均方根电压 Maximum RMS voltage	$V_{RMS}$	70	V
最大直流阻断电压 Maximum DC blocking voltage	$V_{DC}$	100	V
最大正向平均整流电流 Maximum average forward rectified current	$I_{F(AV)}$	5.0	A
正向不重复浪涌电流 8.3 ms 单一正弦半波 Non-repetitive peak forward surge current 8.3 ms singlehalf sine-wave	$I_{FSM}$	100	A
典型热阻 Typical thermal resistance (Note 1)	$R_{\theta JA}$	22	°C/W
工作结温 Junction temperature	$T_j$	150	°C
存储温度 Storage temperature range	$T_{STG}$	-55 --- +150	°C

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.

### 电特性 TA = 25°C 除非另有规定。 Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

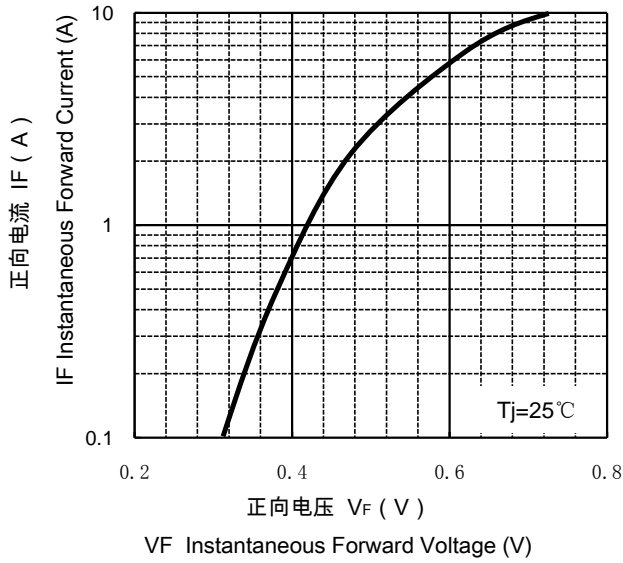
参数 Parameter	符号 Symbols	TB5100	单位 Unit
最大正向电压 @IF=5.0A Maximum forward voltage	$V_F$	0.63	V
最大反向电流 @V <sub>DC</sub> TA= 25°C Maximum reverse current	$I_R$	200	μA



## 特性曲线 Characteristic Curves

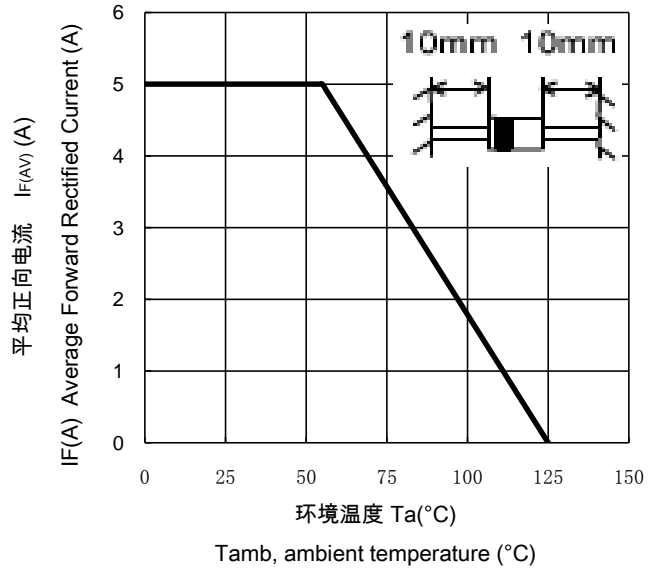
正向特性曲线 (典型值)

TYPICAL FORWARD CHARACTERISTIC



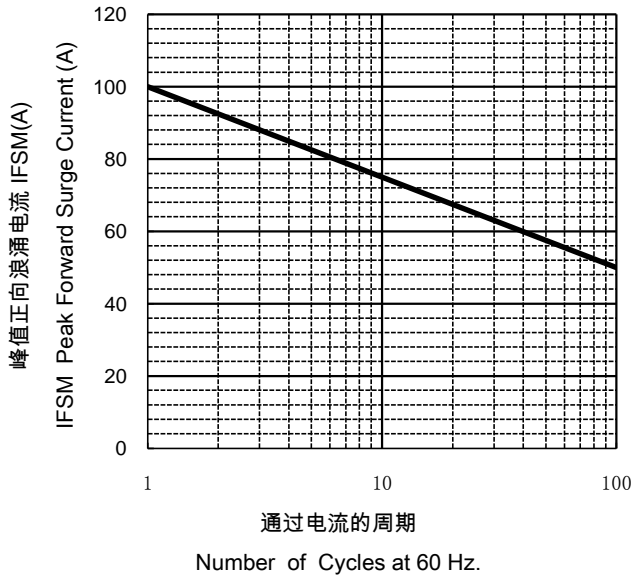
正向电流降额曲线

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

