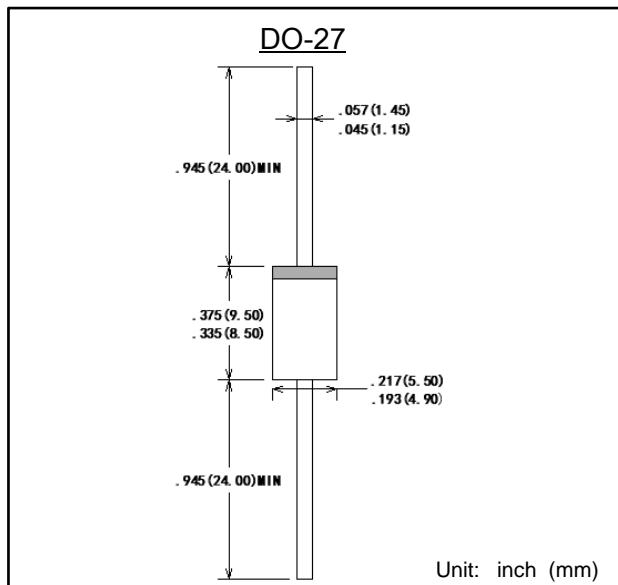




塑封肖特基二极管

反向电压 300 V

正向电流 5.0 A



Trench Low VF Schottky Barrier Rectifiers

Reverse Voltage 300 V

Forward Current 5.0 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
- 引线和管体皆符合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

**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.

参数 Parameter	符号 Symbols	TSR5300L	单位 Unit
最大可重复峰值反向电压 Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	300	V
最大均方根电压 Maximum RMS voltage	V <sub>RMS</sub>	210	V
最大直流阻断电压 Maximum DC blocking voltage	V <sub>DC</sub>	300	V
最大正向平均整流电流 Maximum average forward rectified current	I <sub>F(AV)</sub>	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 <sub>FSM</sub>	150	A
最大正向电压 @IF=5.0A Maximum forward voltage	VF	0.90	V
最大反向电流 @V <sub>DC</sub> TA= 25°C Maximum reverse current TA= 100°C	IR	0.1 10	mA
典型热阻 Typical thermal resistance (Note 1)	R <sub>θJA</sub>	54	°C/W
典型结电容 VR=4.0V,f=1MHz Type junction capacitance	C <sub>J</sub>	320	pF
工作结温 Operating junction temperature rang	T <sub>J</sub>	-55 --- +125	°C
存储温度 Storage temperature rang	T <sub>STG</sub>	-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。

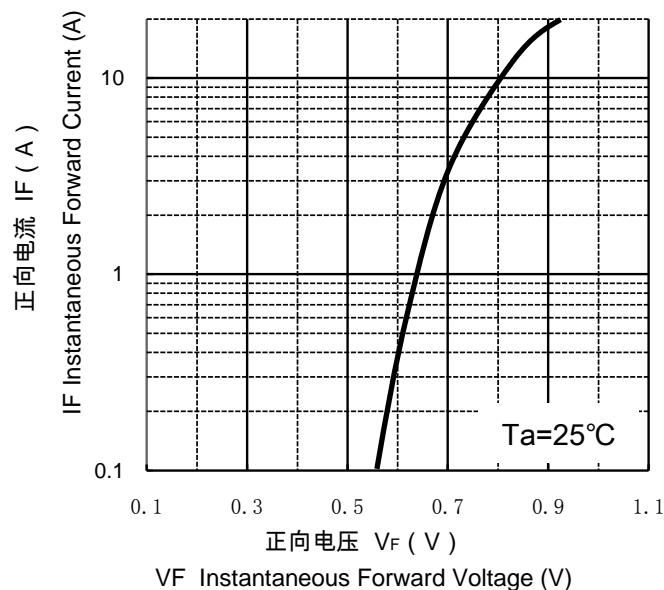
1) Thermal resistance from junction to ambient at 0.375" (9.5 mm) lead length, PCB mounted.



## 特性曲线 Characteristic Curves

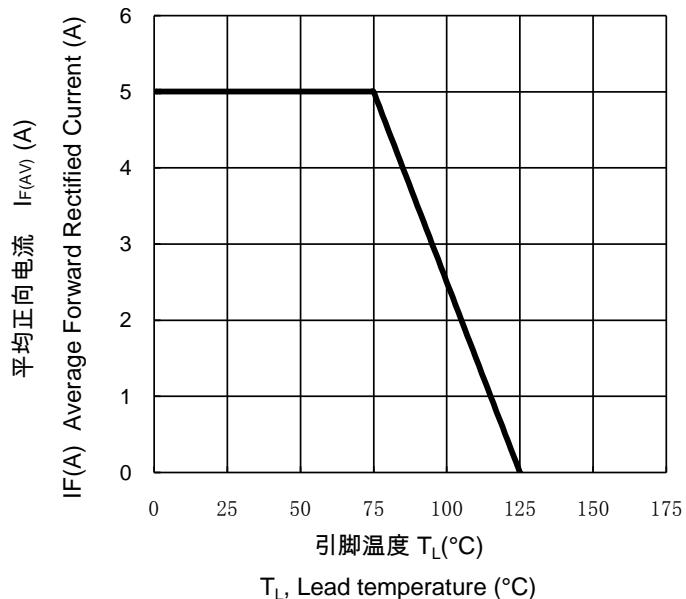
正向特性曲线 (典型值)

TYPICAL FORWARD CHARACTERISTIC



正向电流降额曲线

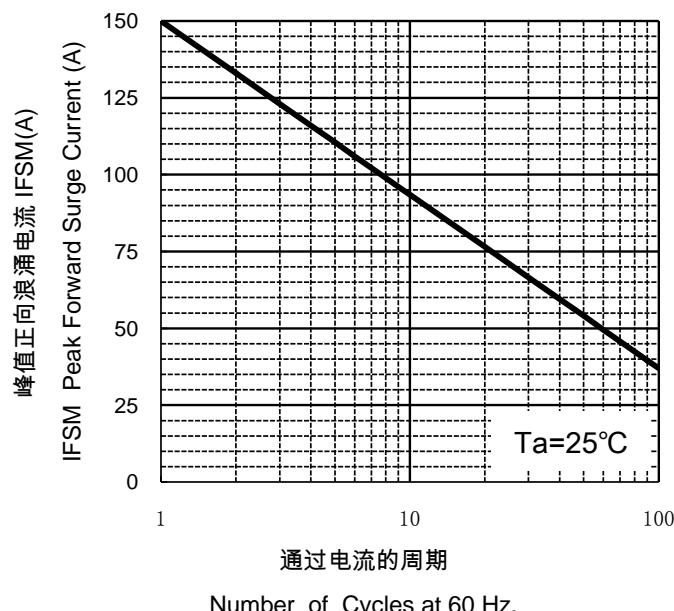
FORWARD CURRENT DERATING CURVE



浪涌特性曲线 (最大值)

MAXIMUM NON REPETITIVE

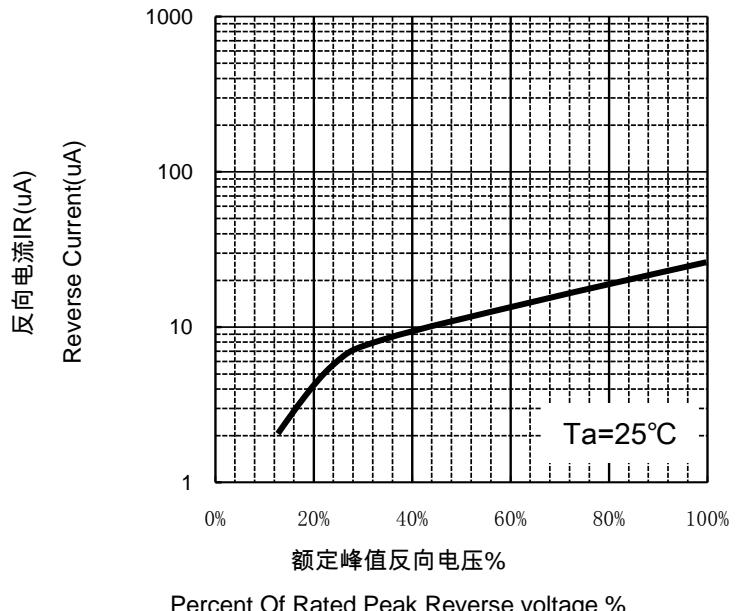
PEAK FORWARD SURGE CURRENT



通过电流的周期  
Number of Cycles at 60 Hz.

反向特性曲线

Typical Reverse Characteristics



额定峰值反向电压 %  
Percent Of Rated Peak Reverse voltage %