

表面安装快恢复整流二极管

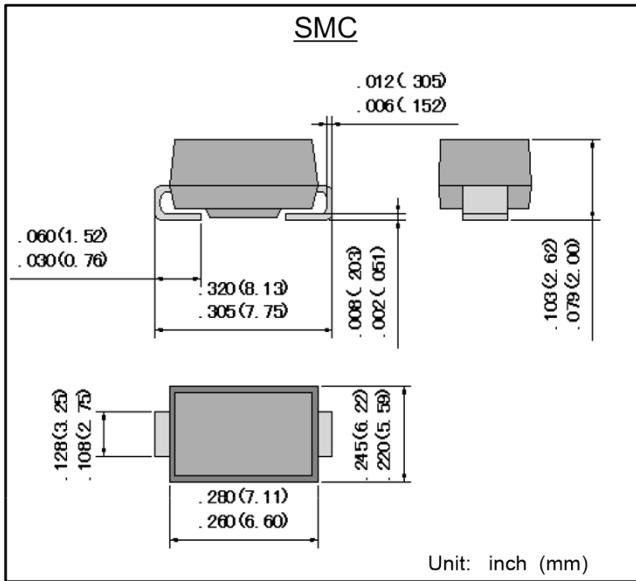
反向电压 50 ~ 1000 V

正向电流 5.0 A

Surface Mount Fast Recovery Rectifiers

Reverse Voltage 50 ~ 1000 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
 - 260°C/10seconds
- 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:SMC 塑封 Case:SMC 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	RS5A	RS5B	RS5D	RS5G	RS5J	RS5K	RS5M	单位 Unit
最大可重复峰值反向电压 Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
最大均方根电压 Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
最大直流阻断电压 Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	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 single half sine-wave	I_{FSM}	150							A
典型热阻 Typical thermal resistance (Note 1)	$R_{\theta JA}$	22							°C/W
最高工作结温 Maximum operating junction temperature	T_J	150.0							°C
存储温度 Storage temperature range	T_{STG}	-55 --- +150							°C

备注 Note:

1) 安装在覆铜面积5.0毫米*5.0毫米的PCB板上,从PN结到周围环境的热阻。

1) Thermal resistance from junction to ambient, PCB mounted with 5.0mm*5.0mm Copper Pad Areas.

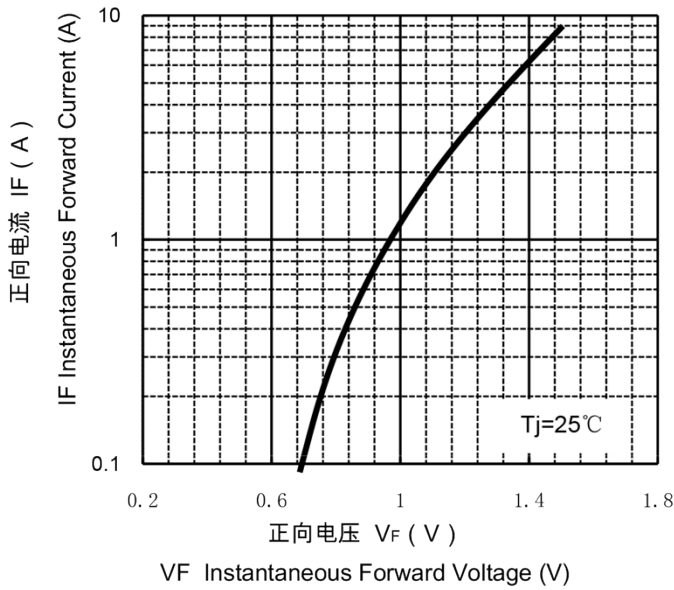
电特性 TA = 25°C 除非另有规定。

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

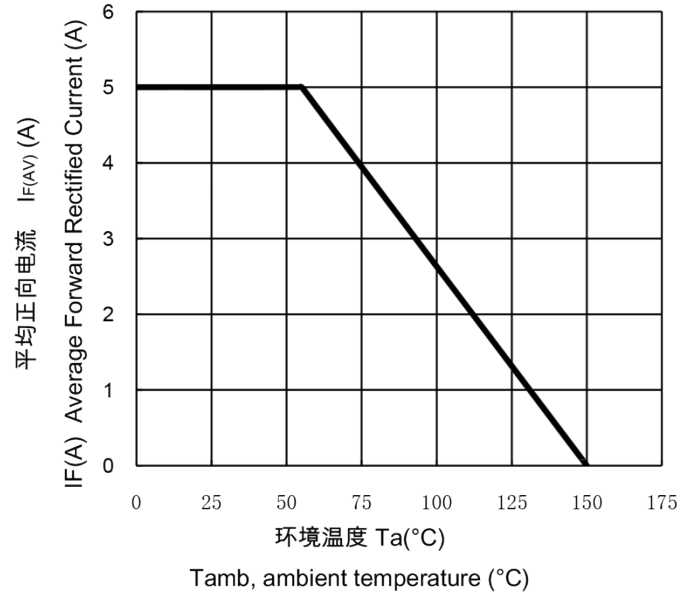
参数 Parameter	符号 Symbols	RS5A	RS5B	RS5D	RS5G	RS5J	RS5K	RS5M	单位 Unit
最大正向电压 @IF=5.0A Maximum forward voltage	V_F	1.3							V
最大反向电流 @V _{DC} TA= 25°C Maximum reverse current	I_R	5							μA
最大反向恢复时间 IF=0.5A, IR=1.0A, IRR=0.25A MAX. reverse recovery time	T_{rr}	150			250		500		ns

特性曲线 Characteristic Curves

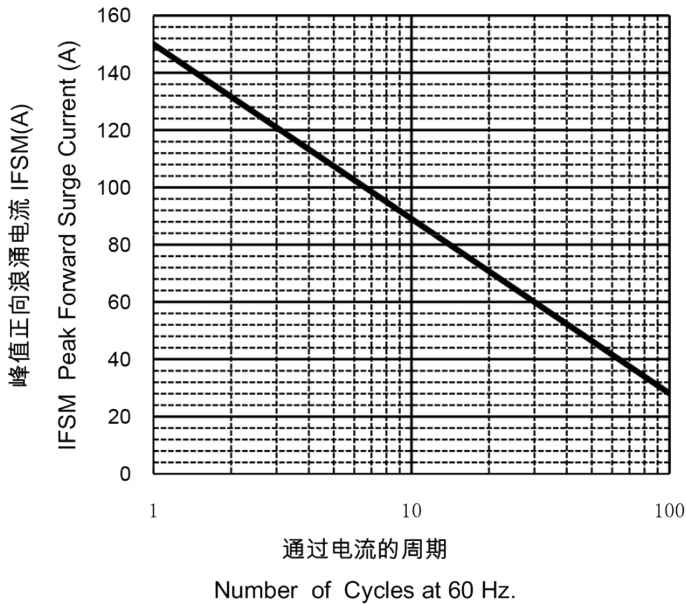
正向特性曲线 (典型值)
TYPICAL FORWARD CHARACTERISTIC



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

