

表面安装高效率整流二极管

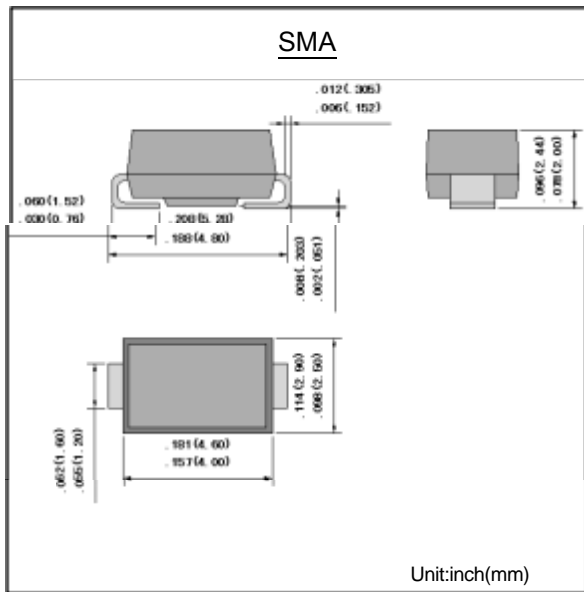
反向电压 50~1000 V

正向电流1.0 A

Surface Mounted High-efficiency Rectifiers

Reverse Voltage 50~1000 V

Forward Current 1.0 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
- 玻璃钝化芯片 Glass passivated chip
- 高温焊接保证
High temperature soldering guaranteed: 260°C/10 秒
260°C/10 seconds
- 引线 and 管体皆符合 RoHS 标准
Lead and body according with RoHS standard

机械数据 Mechanical Data

- 封装外形: SMA 塑封 Case: SMA Moulded plastic
- 环氧树脂: UL 易燃等级: 94V-0
Epoxy: UL 94V-0 rate flameretardant
- 引脚: 镀锡, 无铅 Lead: Pure tin plated, lead free

最大值和特性 $T_A = 25^\circ\text{C}$ 除非另有规定。

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

参数 Parameter	符号 Symbols	US1A	US1B	US1D	US1G	US1J	US1K	US1M	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	$I_{F(AV)}$	1.0							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}	30							A
最大正向电压 @ $I_F = 1.0\text{A}$ Maximum forward voltage	V_F	1.0		1.3		1.7		V	
最大反向电流 @ $V_{DC}, T_A = 25^\circ\text{C}$ Maximum reverse current	I_R	5							μA
最大反向恢复时间 $I_F = 0.5\text{A}, I_R = 1.0\text{A}, I_{RR} = 0.25\text{A MAX.}$ reverse recovery time	T_{rr}	50				75			ns
典型热阻 Typical thermal resistance (Note 1)	$R_{\theta JA}$	125							$^\circ\text{C/W}$
工作结温和存储温度 Operating junction and storage temperature range	T_j, T_{STG}	-55 --- +150							$^\circ\text{C}$

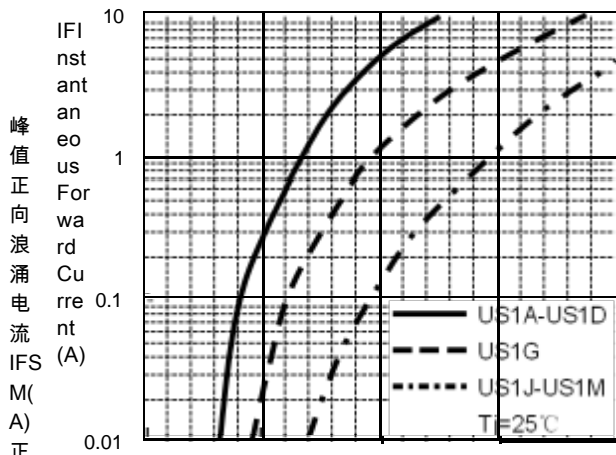
备注 Note:

- 1) 安装在 PCB 板上, 从 PN 结到周围环境的热阻。
- 1) Thermal resistance from junction to ambient, PCB mounted.

特性曲线 Characteristic Curves

正向特性曲线 (典型值)

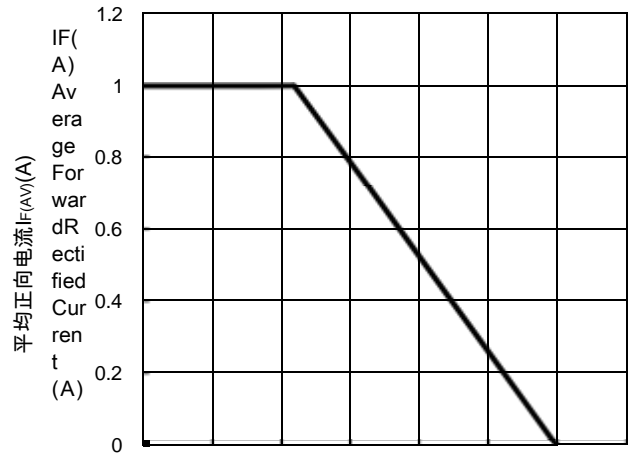
TYPICAL FORWARD CHARACTERISTIC



0.40. 81. 21. 62 正向电压 V_F (V)
 V_F Instantaneous Forward Voltage (V)

正向电流降额曲线

FORWARD CURRENT DERATING CURVE



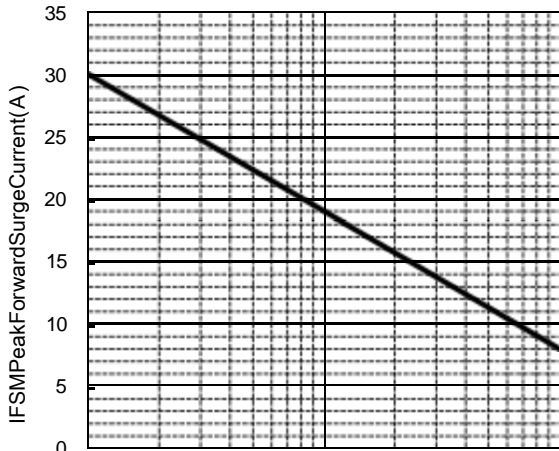
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环境温度 T_a (°C)
 T_{amb} , ambient temperature (°C)

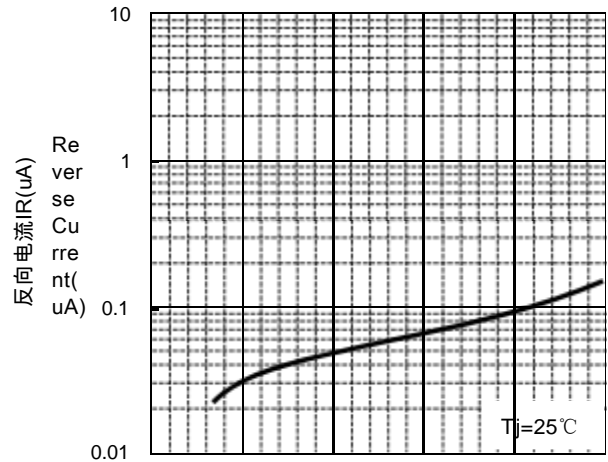
浪涌特性曲线 (最大值) 反向特性曲线

MAXIMUM NON-REPETITIVE Typical Reverse Characteristics

PEAK FORWARD SURGE CURRENT



110100
 通过电流的周期
 Number of Cycles at 60Hz.



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