



ES3G-SMB-3K-84M

表面安装超快速整流二极管

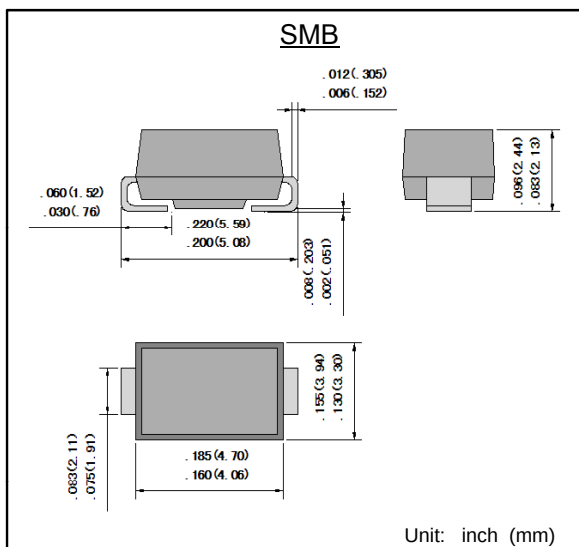
反向电压 50 ~ 600 V

正向电流 3.0 A

Surface Mount Super Fast Recovery Rectifiers

Reverse Voltage 50 ~ 600 V

Forward Current 3.0 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

机械数据 Mechanical Data

- 封装外形:SMB 塑封 Case:SMB 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	ES3G-SMB-3K-84M	单位 Unit
最大可重复峰值反向电压 Maximum repetitive peak reverse voltage	V_{RRM}	400	V
最大均方根电压 Maximum RMS voltage	V_{RMS}	280	V
最大直流阻断电压 Maximum DC blocking voltage	V_{DC}	400	V
最大正向平均整流电流 Maximum average forward rectified current	$I_{F(AV)}$	3.0	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}	80	A
最大正向电压 @IF=3.0A Maximum forward voltage	V_F	1.25	V
最大反向电流 @V _{DC} TA= 25°C Maximum reverse current	I_R	10	μA
最大反向恢复时间 IF=0.5A, IR=1.0A, IRR=0.25A MAX. reverse recovery time	T_{rr}	35	ns
典型热阻 Typical thermal resistance (Note 1)	$R_{\theta JA}$	105	°C/W
工作结温和存储温度 Operating junction and storage temperature range	T_j, T_{STG}	-55 --- +150	°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.

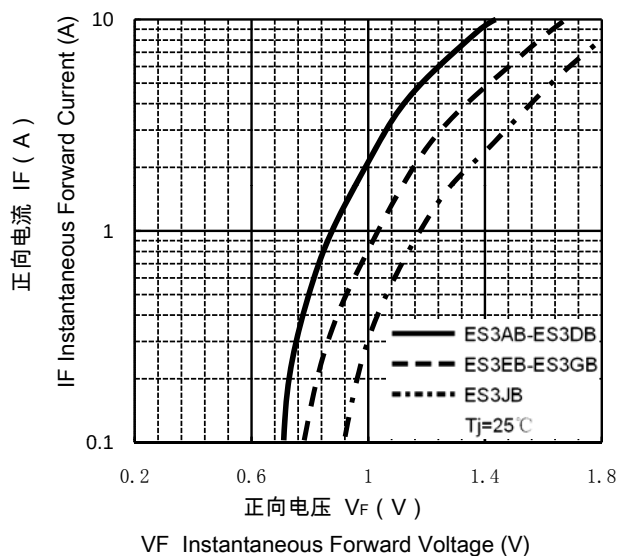


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特性曲线 Characteristic Curves

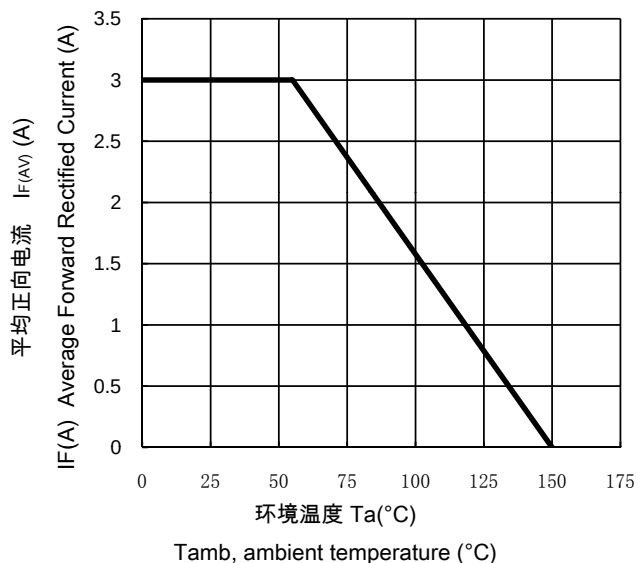
正向特性曲线 (典型值)

TYPICAL FORWARD CHARACTERISTIC



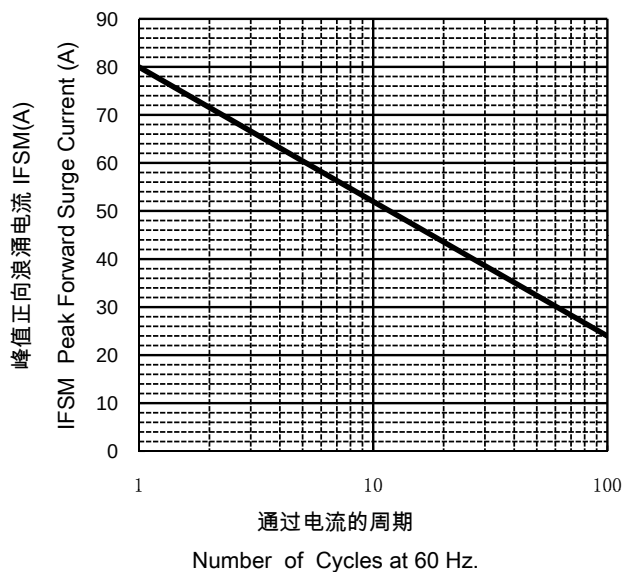
正向电流降额曲线

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

