

塑封肖特基二极管

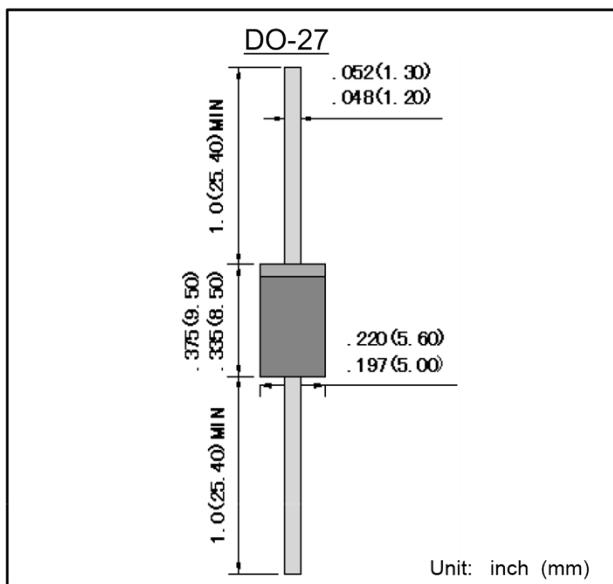
反向电压 40 ~ 200 V

正向电流 5.0 A

Schottky Barrier Plastic Rectifiers

Reverse Voltage 40 ~ 200 V

Forward Current 5.0 A



Unit: inch (mm)

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)
- 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

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	SB 540	SB 560	SB 5100	SB 5150	SB 5200	单位 Unit
最大可重复峰值反向电压 Maximum repetitive peak reverse voltage	V_{RRM}	40	60	100	150	200	V
最大均方根电压 Maximum RMS voltage	V_{RMS}	28	42	70	105	140	V
最大直流阻断电压 Maximum DC blocking voltage	V_{DC}	40	60	100	150	200	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}			150			A
典型热阻 Typical thermal resistance (Note 1)	$R_{\theta JA}$			40			°C/W
工作结温 Operating junction temperature range	T_J	-55 --- +125		-55 --- +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。

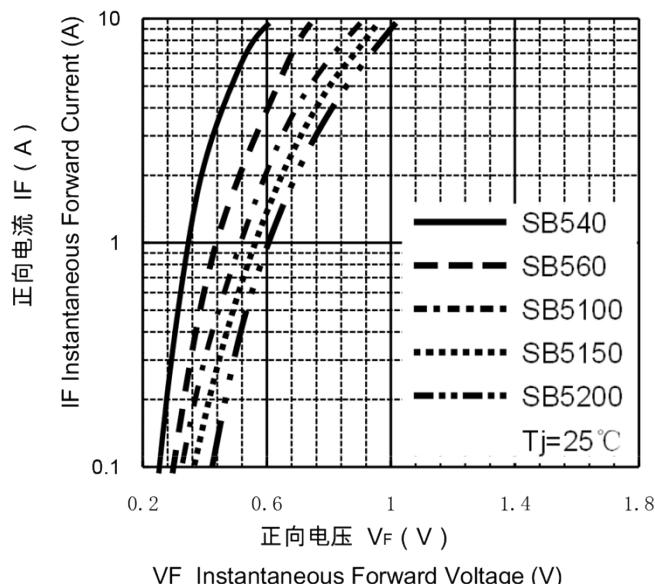
Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

参数 Parameter	符号 Symbols	SB 540	SB 560	SB 5100	SB 5150	SB 5200	单位 Unit
最大正向电压 @IF=5.0A Maximum forward voltage	V_F	0.55	0.70	0.85	0.92	0.95	V
最大反向电流 @ V_{DC} TA= 25°C Maximum reverse current	I_R	500	100	50			μA

特性曲线 Characteristic Curves

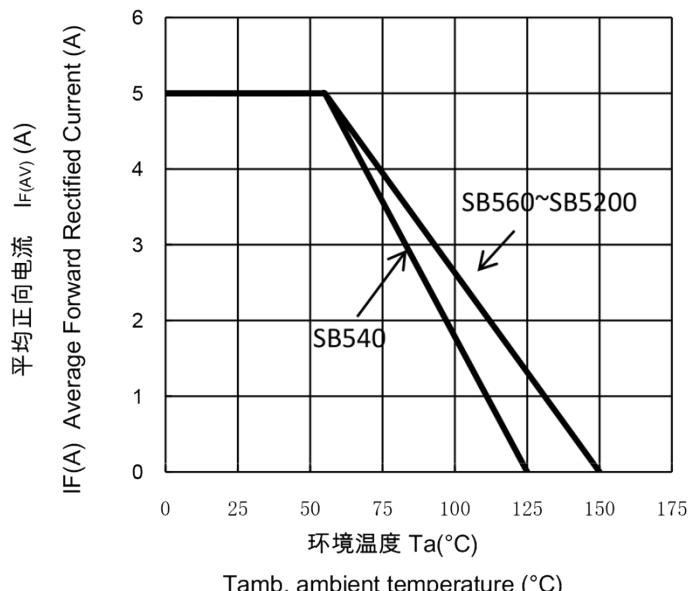
正向特性曲线 (典型值)

TYPICAL FORWARD CHARACTERISTIC



正向电流降额曲线

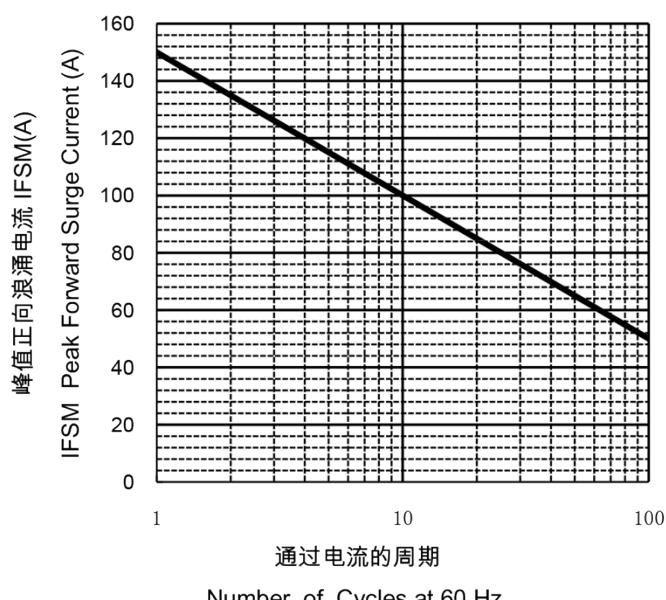
FORWARD CURRENT DERATING CURVE



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

