

单向硅整流桥堆

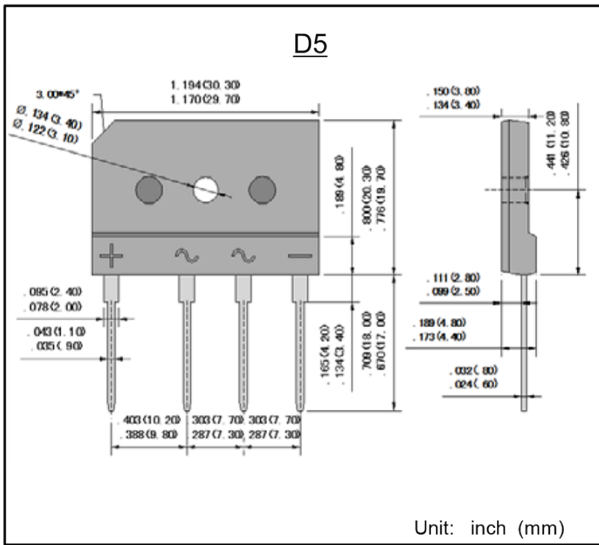
反向电压 50 ~ 1000 V

正向电流 10 A

Single Phase Silicon Bridge Rectifiers

Reverse Voltage 50 ~ 1000 V

Forward Current 10 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
- 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: D5 塑封 Case: D5 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
- 安装位置: 任意 Mounting Position: Any
- 安装扭矩: 推荐值 0.5牛*米 Mounting torque: Recommend 0.5 N*m

最大值和温度特性 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 | D10S B05 | D10S B10 | D10S B20 | D10S B40 | D10S B60 | D10S B80 | D10S B100 | 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 | $I_{F(AV)}$ | 10 | | | | | | | 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} | 170 | | | | | | | A |
| 引线 and 管壳间绝缘强度 Dielectric strength Terminals to case | V_{dis} | 2500 | | | | | | | V |
| 熔断系数 $t \leq 10$ ms Current squared time $t \leq 10$ ms | i^2t | 115 | | | | | | | A ² S |
| 典型热阻 Typical thermal resistance (Note 1、2) | $R_{\theta JA}$ | 26 | | | | | | | °C/W |
| | $R_{\theta JC}$ | 3.4 | | | | | | | |
| 工作结温 Junction temperature | T_J | 150 | | | | | | | °C |
| 存储温度 Storage temperature range | 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.
- 2) 安装在PCB板上, 从PN结到管体的热阻。
2) Thermal resistance from junction to case, PCB mounted.

电特性 TA = 25°C 除非另有规定。

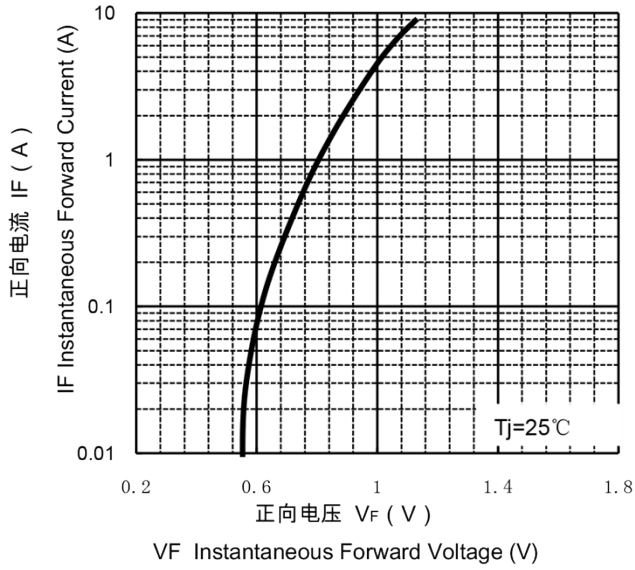
Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

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|---|---------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|------------|
| 最大正向电压 @IF=5.0A Maximum forward voltage | V_F | 1.10 | | | | | | | V |
| 最大反向电流 @ V_{DC} TA= 25°C Maximum reverse current | I_R | 10 | | | | | | | μA |

特性曲线 Characteristic Curves

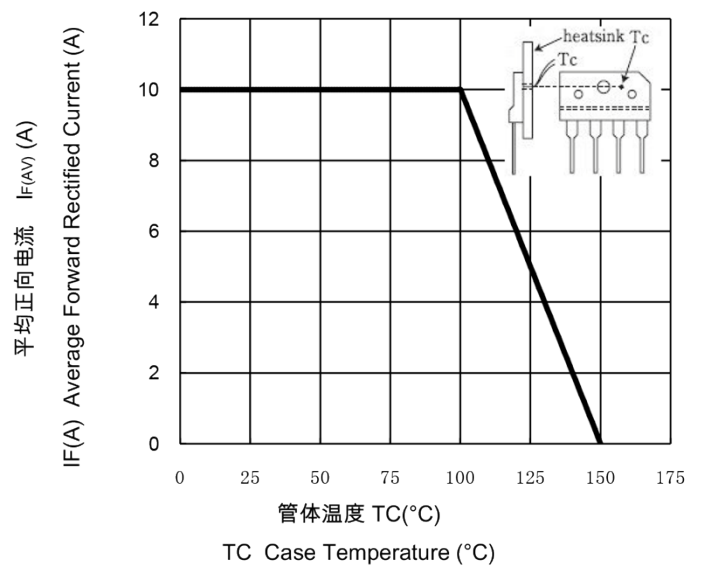
正向特性曲线 (典型值)

TYPICAL FORWARD CHARACTERISTIC



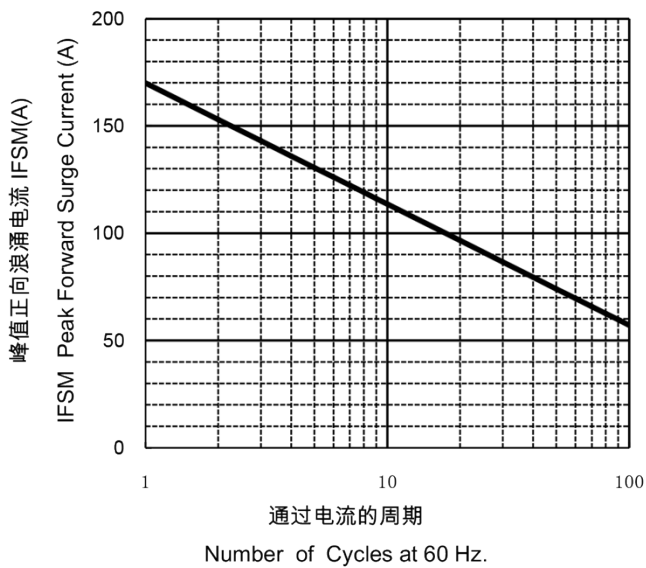
正向电流降额曲线

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

