



HD50SB60-HD50SB100

单向硅整流桥堆

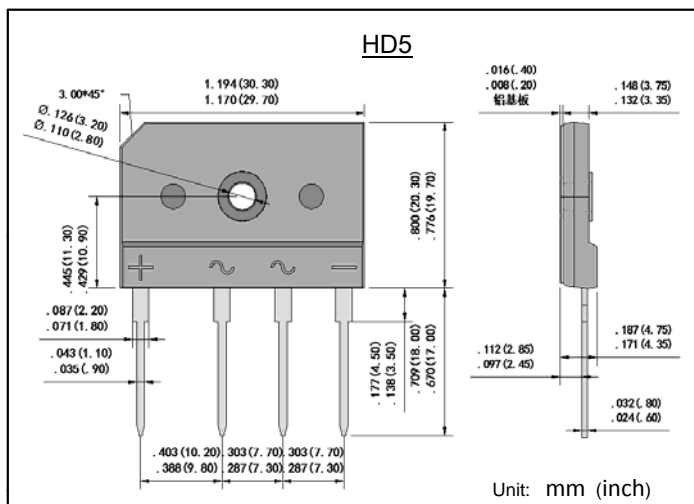
反向电压 600 ~ 1000 V

正向电流 50 A

Single Phase Silicon Bridge Rectifiers

Reverse Voltage 600 ~ 1000 V

Forward Current 50 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:HD5 塑封 Case:HD5 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	HD50SB60	HD50SB80	HD50SB100	单位 Unit
最大可重复峰值反向电压 Maximum repetitive peak reverse voltage	V_{RRM}	600	800	1000	V
最大均方根电压 Maximum RMS voltage	V_{RMS}	420	560	700	V
最大直流阻断电压 Maximum DC blocking voltage	V_{DC}	600	800	1000	V
平均整流电流 Average forward rectified current	60Hz正弦波负载 60Hz sine wave load	带散热片, TC=100°C with heatsink, TC=100°C	50		A
		无散热片 Ta=25°C without heatsink, Ta =25°C	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}		500		A
引线和管壳间绝缘强度 Dielectric strength Terminals to case	V_{dis}		2500		V
熔断系数 $t \leq 8.3$ ms Current squared time $t \leq 8.3$ ms	I^2t		830		A ² S
典型热阻 Typical thermal resistance	$R_{\theta JA}$ (Note 1)		22		°C/W
	$R_{\theta JC}$ (Note 2)		1.0		
工作结温 Operating 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100mm*100mm*1.6mm铝基板散热器上, 从PN结到管体的热阻。

2) Thermal resistance from junction to case, installed on 100mm*100mm*1.6mm aluminum radiator.

电特性 TA = 25°C 除非另有规定。

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

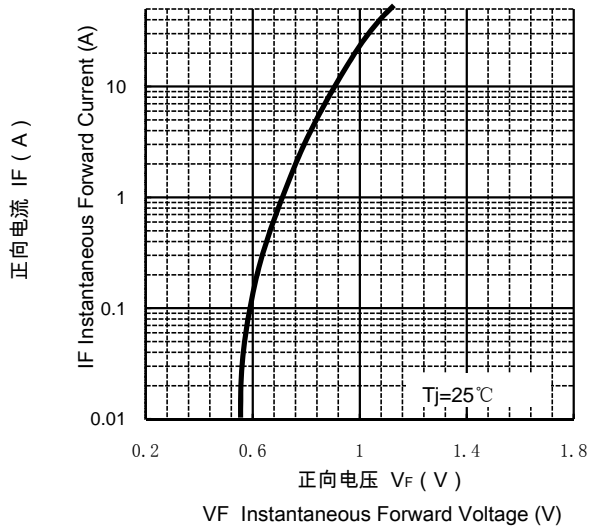
参数 Parameter	符号 Symbols	HD50SB60	HD50SB80	HD50SB100	单位 Unit
最大正向电压 @IF=25A Maximum forward voltage	V_F		1.05		V
最大反向电流 @V _{DC} TA= 25°C Maximum reverse current	I_R		10		μA



特性曲线 Characteristic Curves

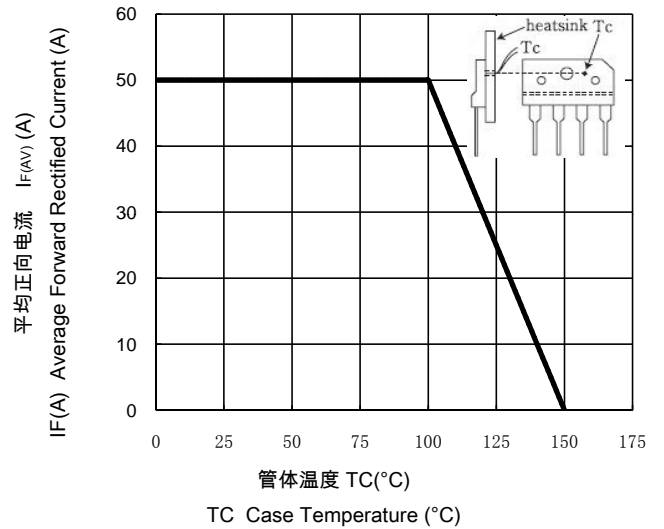
正向特性曲线 (典型值)

TYPICAL FORWARD CHARACTERISTIC



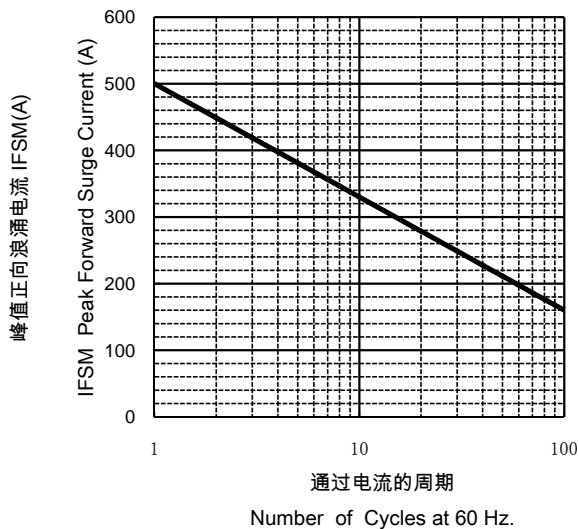
正向电流降额曲线

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

