

单向硅整流桥堆

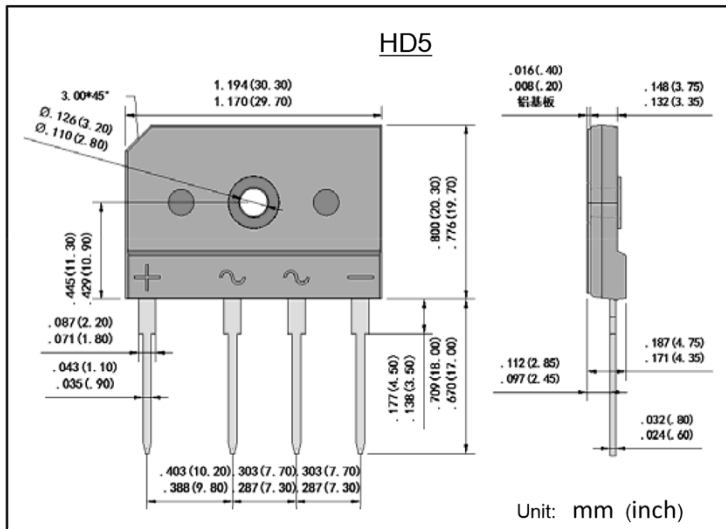
反向电压 600~1000 V

正向电流 40 A

Single Phase Silicon Bridge Rectifiers

Reverse Voltage 600~1000 V

Forward Current 40 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	HD40SB60	HD40SB80	HD40SB100	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	$I_{F(AV)}$	40			A
		无散热片 Ta=25°C without heatsink, Ta =25°C		4.0			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}	450			A
引线 and 管壳间绝缘强度 Dielectric strength Terminals to case			Vdis	2500			V
熔断系数 $t \leq 8.3$ ms Current squared time $t \leq 8.3$ ms			I^2t	670			A ² S
典型热阻 Typical thermal resistance			$R_{\theta JA}(\text{Note 1})$	18			°C/W
			$R_{\theta JC}(\text{Note 2})$	0.75			
工作结温 Operating junction temperature range			T_J	-55 --- +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

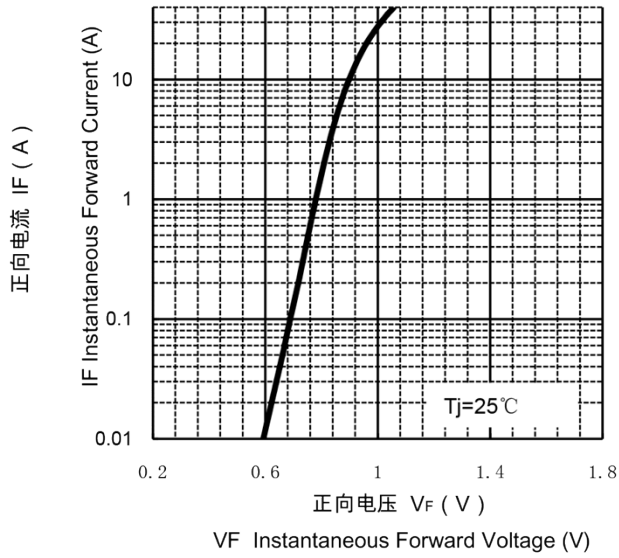
Ratings at 25°C ambient temperature unless otherwise specified.

参数 Parameter	符号 Symbols	HD40SB60	HD40SB80	HD40SB100	单位 Unit
最大正向电压 @IF=20.0A 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

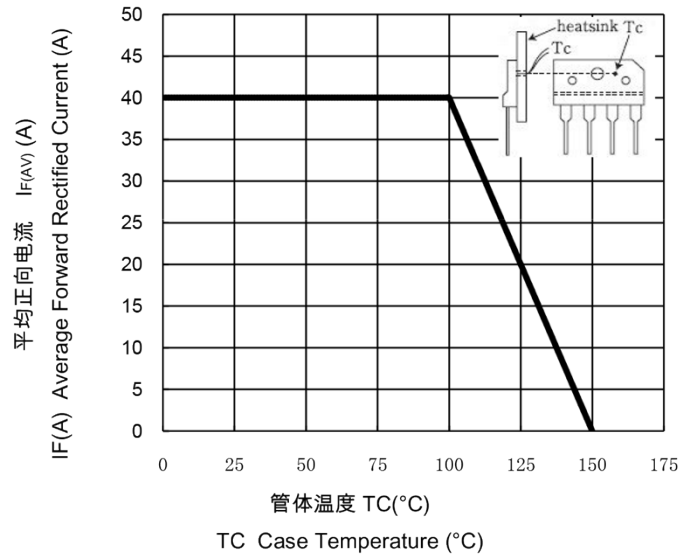
正向特性曲线 (典型值)

TYPICAL FORWARD CHARACTERISTIC



正向电流降额曲线

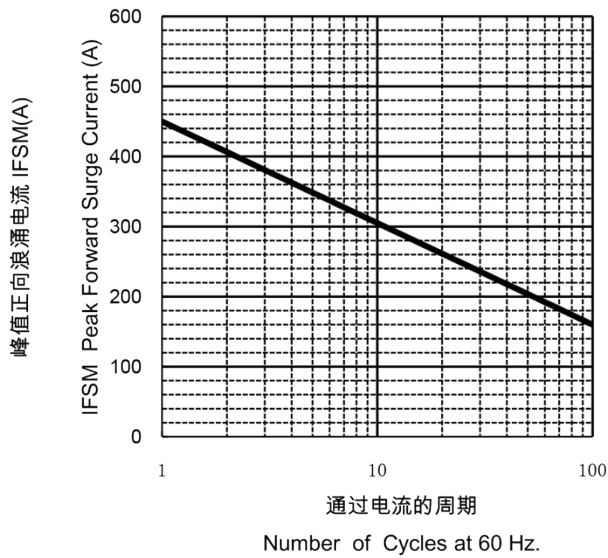
FORWARD CURRENT DERATING CURVE



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

