# SKD160

## 三相整流桥模块

### 特点

1). 芯片与底板电气绝缘, 2500V交流电压
2). 优良的温度特性和功率循环能力
3). 低正向压降
4). 高浪涌电流
5). 最高工作结温达150℃
6). 体积小, 重量轻

### 典型应用

1). 仪器设备的直流电源
2). PWM 变频器的输入整流电源
3). 逆变焊机
4).直流电机励磁电源
5).开关电源的输入整流
6).软起动电容充电
7). 电气拖动和辅助电流
8). 电池充电直流电源

| | |
|---|---|
| $I_O$ | 160A |
| $V_{RRM}$ | 400-2000V |
| $I_{FSM}$ | 1.8 KA |
| $I^2t$ | 16.5 $A^2S*10^3$ |

### 主要参数

| 符号 | 参数 | 测试条件 | 结温 | 参数值 | | | 单位 |
|---|---|---|---|---|---|---|---|
| | | | $T_j$(℃) | 最小 | 典型 | 最大 | |
| $I_O$ | 直流输出电流 | 单相全波整流电路, $T_C$=100℃ | 150 | | | 160 | A |
| $V_{RRM}$ | 反向重复峰值电压 | $V_{RRM}$ tp=10ms $V_{RSM}$= $V_{RRM}$+200V | 150 | 400 | 1600 | 2000 | V |
| $I_{RRM}$ | 反向重复峰值电流 | at $V_{RRM}$ | 150 | | | 5 | mA |
| $I_{FSM}$ | 正向不重复浪涌电流 | 10ms 正弦半波 | 150 | | | 1.8 | KA |
| $I^2t$ | 浪涌电流平方时间积 | $V_R$=0.6$V_{RRM}$ | | | | 16.5 | $A^2s*10^3$ |
| $V_{FO}$ | 门槛电压 | | 150 | | | 0.75 | V |
| $r_F$ | 斜率电阻 | | | | | 1.9 | mΩ |
| $V_{FM}$ | 正向峰值电压 | $I_{FM}$=160A | 25 | | | 1.30 | V |
| $R_{th(j-c)}$ | 热阻抗(结至壳) | 单面散热 | | | | 0.1 | ℃ /W |
| $R_{th(c-h)}$ | 热阻抗(壳至散热器) | 单面散热 | | | | 0.07 | ℃ /W |
| $V_{iso}$ | 绝缘电压 | 50Hz,R.M.S,t=1min,$I_{iso}$:1mA(max) | | 2500 | | | V |
| $F_m$ | 安装扭矩(M6) | | | | 6 | | N·m |
| | 安装扭矩(M5) | | | | 4 | | N·m |
| $T_{stg}$ | 贮存温度 | | | -40 | | 125 | ℃ |
| $W_t$ | 质量 | 外形为103A | | | 460 | | g |
| Size | 包装盒尺寸 | 115×82×52（1只装） | | | | | mm |

## 性能曲线图

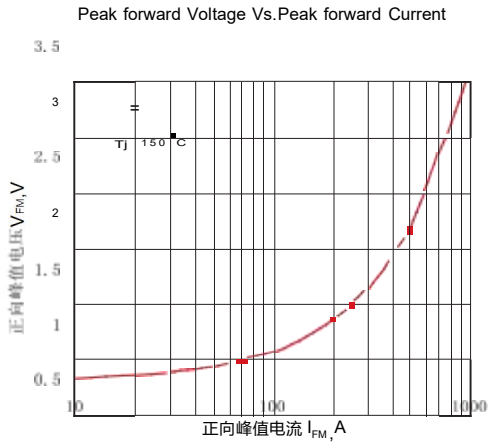



Fig.1 正向伏安特性曲线

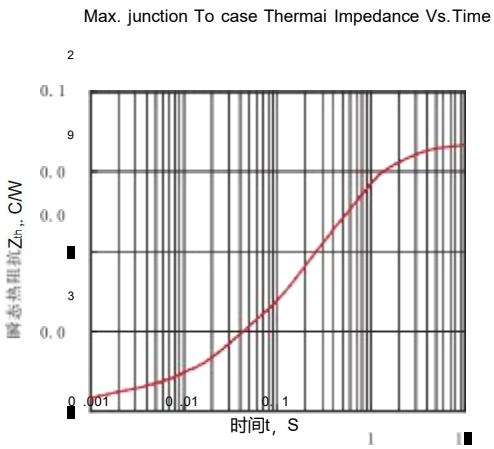



Fig.2 瞬态热阻抗曲线

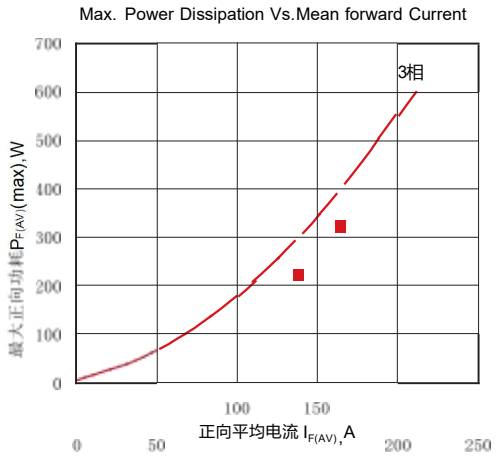



Fig.3 最大正向功耗与平均电流的关系曲线

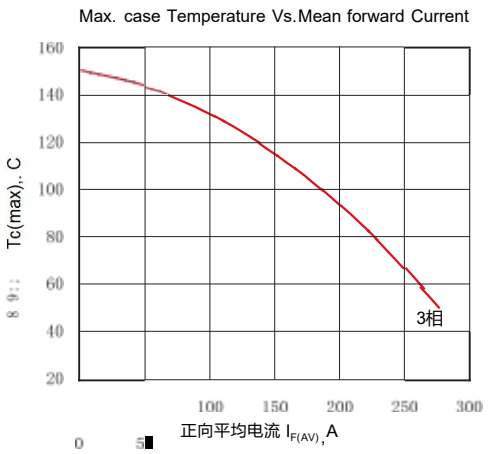



Fig.4 管壳温度与平均电流的关系曲线

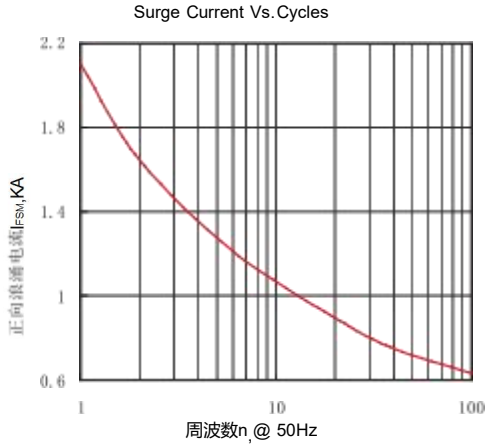



Fig.5 正向浪涌电流与周波数的关系曲线

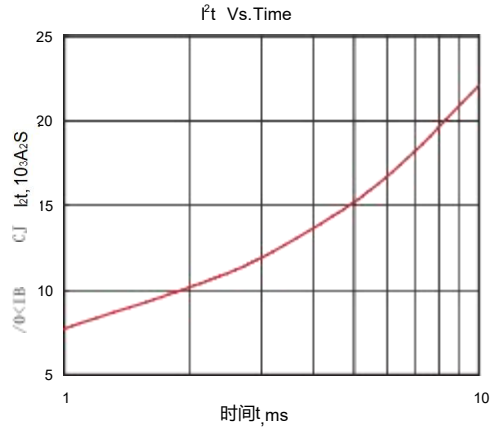
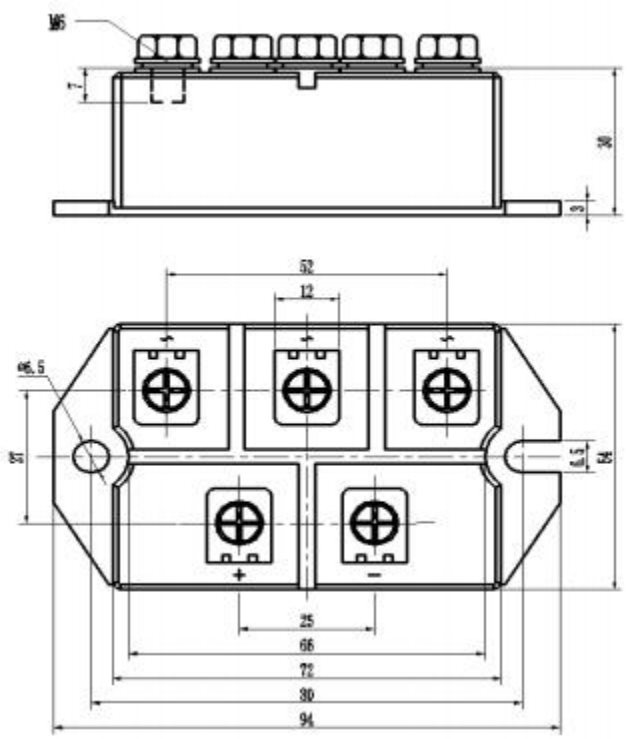
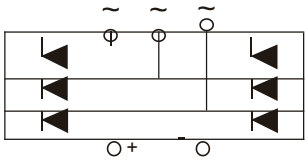



Fig.6 $I^2t$特性曲线

## 外形尺寸图




## 线路图



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