

BT137-600E

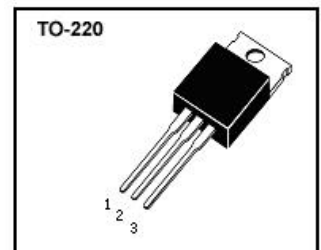
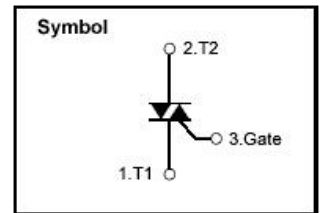
主要用途

非绝缘型双向可控硅, 用于交流开关、风扇控制、温度控制、照明控制等

极限值 (T_a=25°C)

T _{stg}	— 贮存温度	.....	-40~125 °C
T _j	— 结温	.....	-40~125 °C
P _{GM}	— 峰值门极功耗	.....	5 W
V _{DRM}	— 重复峰值断态电压	.....	600V
I _T (RMS)	— RMS 通态电流 (T _a =105°C)	.....	4A
V _{GM}	— 峰值门极电压	.....	10 V
I _{GM}	— 峰值门极电流	.....	2.0 A
I _{TSM}	— 浪涌通态电流(一个周期,50/60Hz,峰值,不重复)	.....	80/88A

外形图及引脚排列

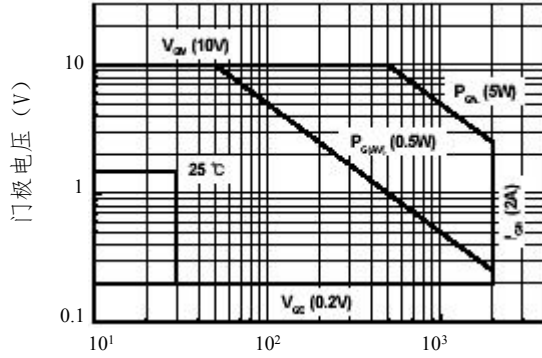


电参数 (T_a=25°C)

参数符号	符号说明	最小值	典型值	最大值	单位	测试条件
I _{DRM}	重复峰值断态电流			2.0	mA	V _D =V _{DRM} , 单相, 半波, T _J =125 °C
V _{TM}	峰值通态电压			1.4	V	I _T =12A, 快速测量
I _{+GT1}	门极触发电流 (I)			30	mA	V _D =6V, R _L =10 ohm
I _{-GT1}	门极触发电流 (II)			30	mA	V _D =6V, R _L =10 ohm
I _{-GT3}	门极触发电流 (III)			30	mA	V _D =6V, R _L =10 ohm
V _{+GT1}	门极触发电压 (I)			1.5	V	V _D =6V, R _L =10 ohm
V _{-GT1}	门极触发电压 (II)			1.5	V	V _D =6V, R _L =10 ohm
V _{-GT3}	门极触发电压 (III)			1.5	V	V _D =6V, R _L =10 ohm
V _{GD}	不触发门极电压	0.2			V	T _J =125 °C, V _D =1/2V _{DRM}
(dv/dt) _c	断态电压临界上升率	10.0			V/μS	T _J =125 °C, V _D =2/3V _{DRM}
R _{th(j-c)}	热阻			2.0	°C/W	(di/dt) _c =-4.0A/ms 结到外壳
I _H	维持电流		15		mA	

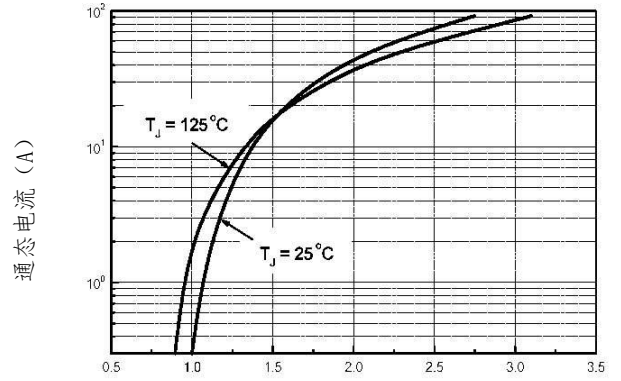
特性曲线

图一、门极特性



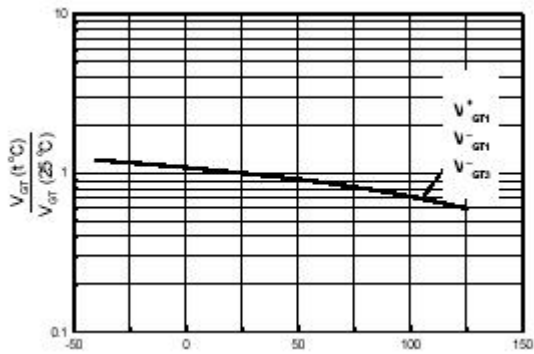
门极电流 (mA)

图二、通态电压



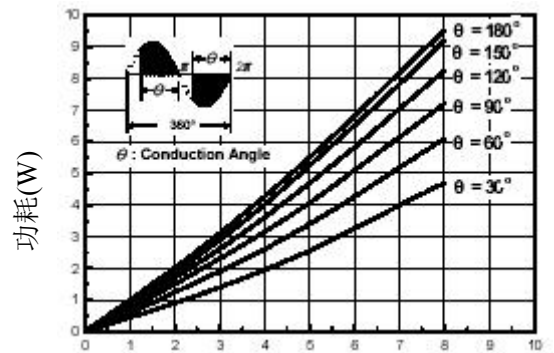
通态电压 (V)

图三、门极触发电压-----结温



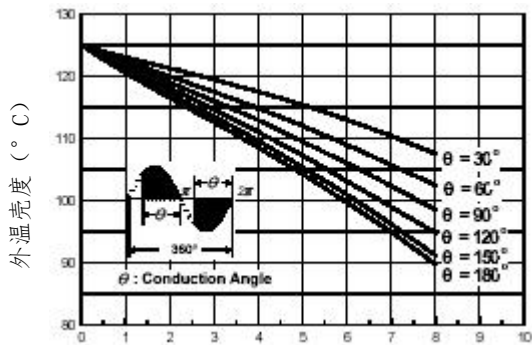
结温 (°C)

图四、通态电流---最大功耗



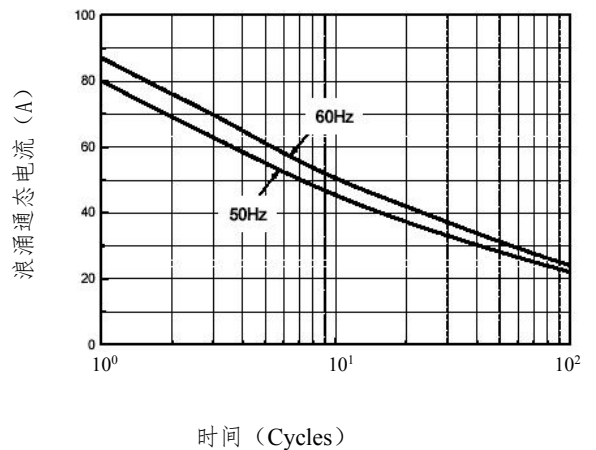
RMS 通态电流 (A)

图五、通态电流---外壳温度



RMS 通态电流 (A)

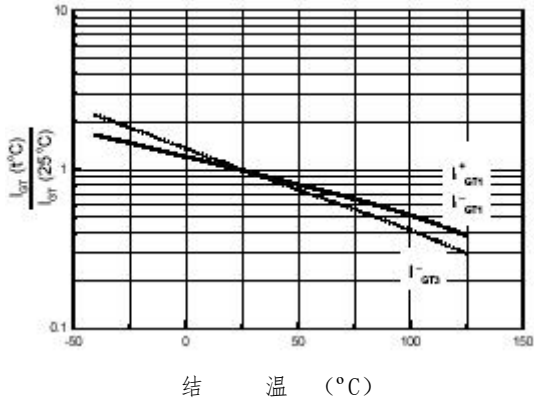
图六、浪涌通态最大电流 (不重复)



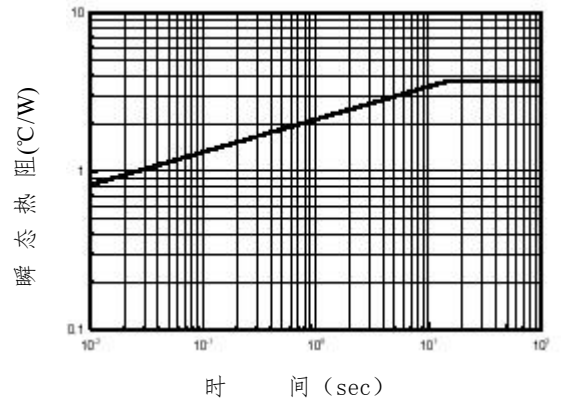
时间 (Cycles)

特性曲线

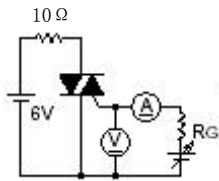
图七、门极触发电流——结温



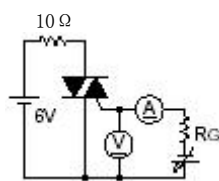
图八、瞬态热阻



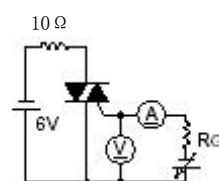
图九、门极触发电特性测试电路



测试方式 I



测试方式 II



测试方式 III