



汕头华汕电子器件有限公司

INSULATED TYPE TRIAC

HBT139F-600

对应国外型号
BT139F-600

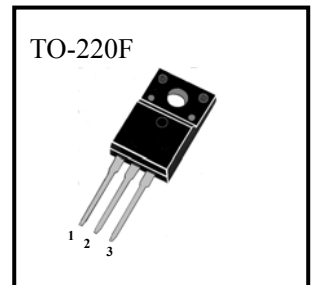
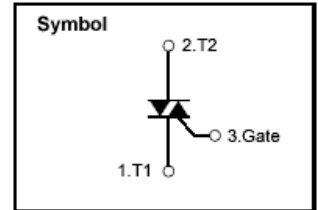
■ 主要用途

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 ($T_a=25^{\circ}\text{C}$)

T_{stg} ——贮存温度	-40~150 $^{\circ}\text{C}$
T_j ——结温	-40~125 $^{\circ}\text{C}$
P_{GM} ——峰值门极功耗	5W
V_{DRM} ——重复峰值断态电压	600V
$I_T(\text{RMS})$ ——RMS 通态电流($T_c=41^{\circ}\text{C}$)	16A
V_{GM} ——峰值门极电压	10V
I_{GM} ——峰值门极电流	2.0A
I_{TSM} ——浪涌通态电流(一个周期,50/60Hz,峰值,不重复)	145/155A
V_{ISO} ——绝缘击穿电压(RMS, 交流 1 分钟)	1500V

■ 外形图及引脚排列



■ 电参数 ($T_a=25^{\circ}\text{C}$)

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, $T_J=125^{\circ}\text{C}$
V_{TM}	峰值通态电压			1.6	V	$I_T=20\text{A}$, 快速测量
I_{+GT1}	门极触发电流 (I)			25	mA	$V_D=6\text{V}$, $R_L=10\ \text{ohm}$
I_{-GT1}	门极触发电流 (II)			25	mA	$V_D=6\text{V}$, $R_L=10\ \text{ohm}$
I_{-GT3}	门极触发电流 (III)			25	mA	$V_D=6\text{V}$, $R_L=10\ \text{ohm}$
V_{+GT1}	门极触发电压 (I)			1.5	V	$V_D=6\text{V}$, $R_L=10\ \text{ohm}$
V_{-GT1}	门极触发电压 (II)			1.5	V	$V_D=6\text{V}$, $R_L=10\ \text{ohm}$
V_{-GT3}	门极触发电压 (III)			1.5	V	$V_D=6\text{V}$, $R_L=10\ \text{ohm}$
V_{GD}	不触发门极电压	0.2			V	$T_J=125^{\circ}\text{C}$, $V_D=1/2V_{DRM}$
$(dv/dt)_c$	断态电压临界上升率	10			V/ μS	$T_J=125^{\circ}\text{C}$, $V_D=2/3V_{DRM}$
$R_{th(j-c)}$	热阻			3.5	$^{\circ}\text{C}/\text{W}$	$(di/dt)_c=-6.0\text{A}/\text{ms}$ 结到外壳
I_H	维持电流		20		mA	



■ 特性曲线

Fig 1. Gate Characteristics

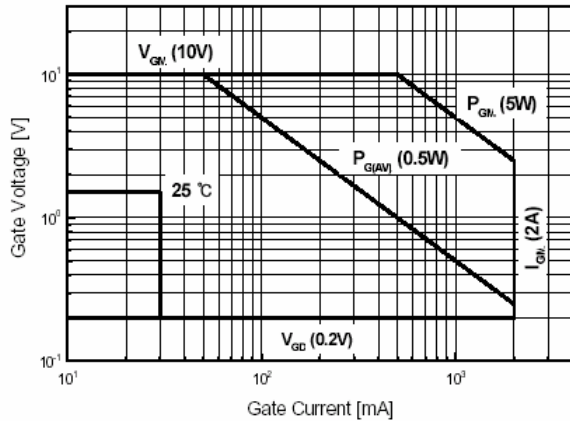


Fig 2. On-State Voltage

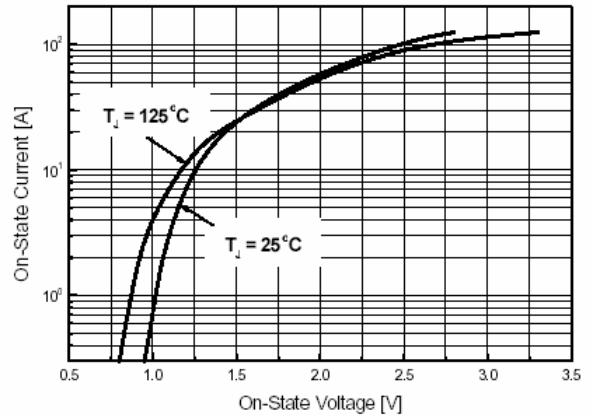


Fig 3. On State Current vs. Maximum Power Dissipation

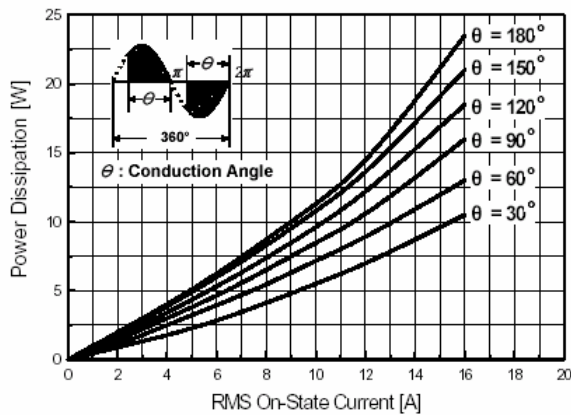


Fig 4. On State Current vs. Allowable Case Temperature

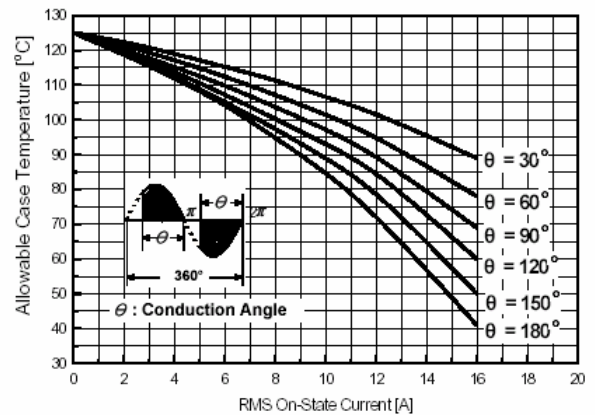


Fig 5. Surge On-State Current Rating (Non-Repetitive)

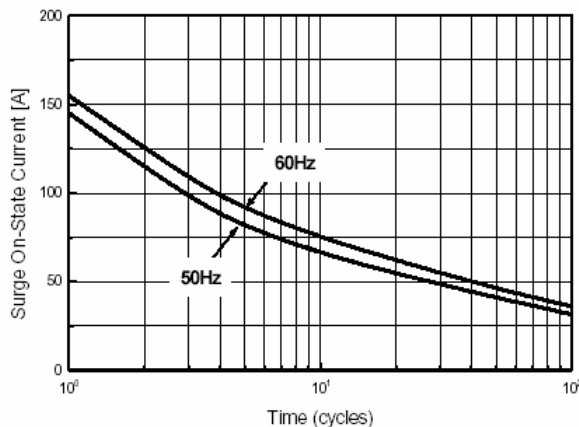
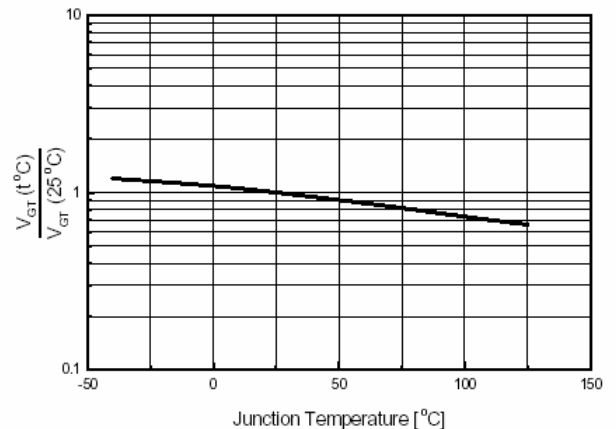


Fig 6. Gate Trigger Voltage vs. Junction Temperature





汕头华汕电子器件有限公司

INSULATED TYPE TRIAC

HBT139F-600

对应国外型号
BT139F-600

■ 特性曲线

Fig 7. Gate Trigger Current vs. Junction Temperature

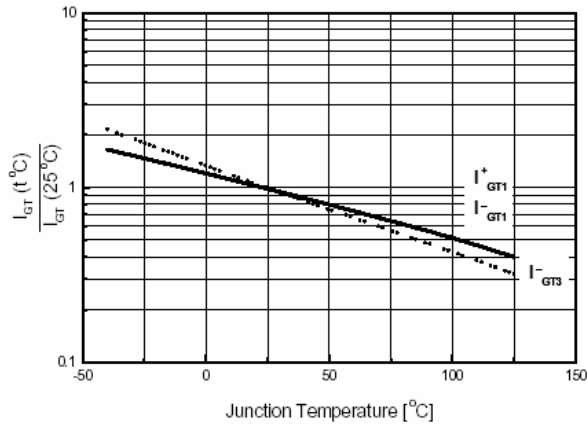


Fig 8. Transient Thermal Impedance

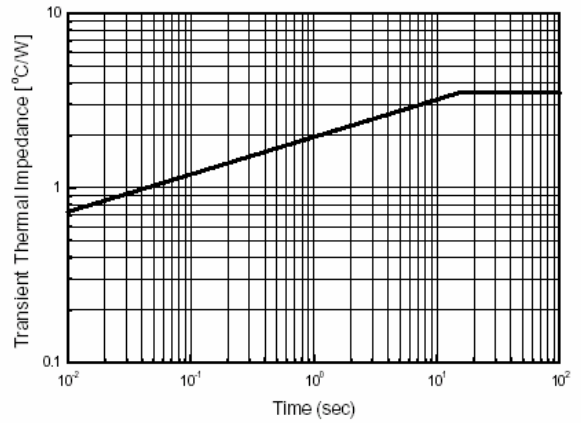


Fig 9. Gate Trigger Characteristics Test Circuit

