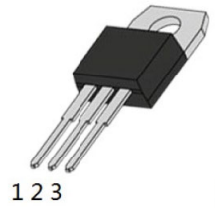
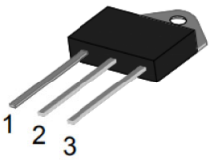
## ◆ 描述:

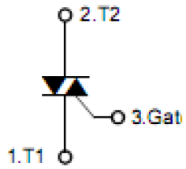
DTJ16A60/80/120 三端双向可控硅具有承受大载荷冲击的能力，能提供高的的 dv/dt，对电磁干扰有很强的抵抗力。是具有高换向性能的三象限产品。特别推荐使用于感性负载。




TO-220A　　TO-220B




TO-3P
(Insulated)




## ◆ 主要特征:

| 符 号 | 规范值 | 单 位 |
|---|---|---|
| $I_{T(RMS)}$ | 16.0 | A |
| $V_{DRM}/V_{RRM}$ | 600/800/1200 | V |

## ◆ 极限值:

| 参数 | 符号 | 数值 | 单位 |
|---|---|---|---|
| 贮存温度 | $T_{stg}$ | -40~150 | ℃ |
| 结温 | $T_j$ | -40~125 | ℃ |
| 断态重复峰值电压($T_j$=25℃) | $V_{DRM}$ | 600/800/1200 | V |
| 反向重复峰值电压($T_j$=25℃) | $V_{RRM}$ | 600/800/1200 | V |
| 通态均方根电流 | $I_{T(RMS)}$ | 16 | A |
| 浪涌电流(全波, $t_p$=20mS) | $I_{TSM}$ | 250 | A |
| $I^2t$ 值 ($t_p$=10ms) | $I^2t$ | 340 | $A^2s$ |
| 通态电流临界上升率($I_G$=2×$I_{GT}$)　$T_j$=125℃ | dI/dt | 50 | A/μs |
| 门极峰值电流 | $I_{GM}$ | 4 | A |
| 门极平均功率 | $P_{G(AV)}$ | 1 | W |
| 门极峰值功率 | $P_{GM}$ | 10 | W |

## ◆ 电特性（$T_j$=25℃，除非另有说明）：

| 参数 | 测试条件 | 象限 | | 数值 | 单位 |
|---|---|---|---|---|---|
| $I_{GT}$ | $V_D$=12V, $R_L$=33Ω | Ⅰ-Ⅱ-Ⅲ | MAX | 35 | mA |
| $V_{GT}$ | | | | 1.3 | V |
| $V_{GD}$ | $V_D$=$V_{DRM}$ $T_j$=125℃ | Ⅰ-Ⅱ-Ⅲ | MIN | 0.2 | V |
| $I_H$ | $I_T$=100mA | | MAX | 35 | mA |
| $I_L$ | $I_G$=1.2$I_{GT}$ | Ⅰ-Ⅲ | MAX | 50 | mA |
| | | Ⅱ | | 60 | |
| dV/dt | $V_D$=2/3$V_{DRM}$ $T_j$=125℃ G 极开路 | | MIN | 1000 | V/μs |

## ◆ 静态特性

| 符号 | 测试条件 | | | 数值 | 单位 |
|---|---|---|---|---|---|
| $V_{TM}$ | $I_{TM}$=35A $t_p$=380μs | $T_j$=25℃ | MAX | 1.5 | V |
| $I_{DRM}$ $I_{RRM}$ | $V_{DRM}$= $V_{RRM}$ | $T_j$=25℃ | MAX | 5 | μA |
| | | $T_j$=125℃ | | 1 | mA |

## ◆ 热阻

| 符号 | 测试条件 | | 数值 | 单位 |
|---|---|---|---|---|
| $R_{th(j-c)}$ | 结到外壳(AC) | TO-220A(绝缘） | 1.5 | ℃/W |
| | | TO-220B(非绝缘） | 1.1 | |
| | | TO-3P(绝缘） | 0.67 | |

## ◆ 产品命名规范

**DTJ16A60/80/120**

**DTJ = Din-Tek三端双向可控硅**

**16A = 电流值**

04A= 4A
06A = 6A
08A = 8A
10A = 10A
12A = 12A
16A = 16A

**60/80/120 = 电压值**

60 = 600V
80 = 800V
120 = 1200V

图 1：最大功耗与均方根电流的关系

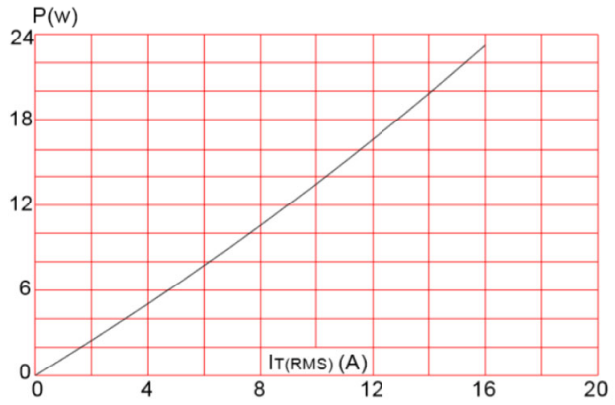



图 2：均方根电流与温度的变化

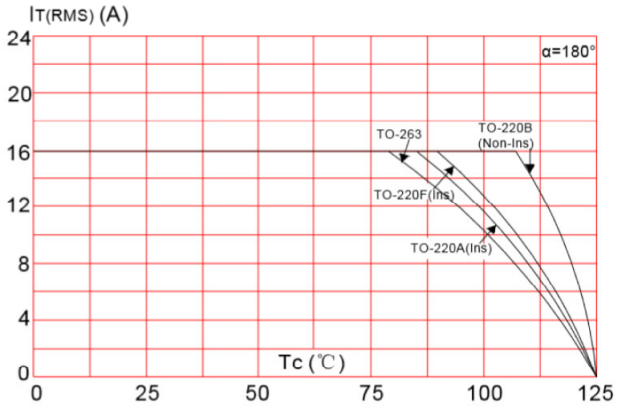



图 3：浪涌电流峰值与循环次数

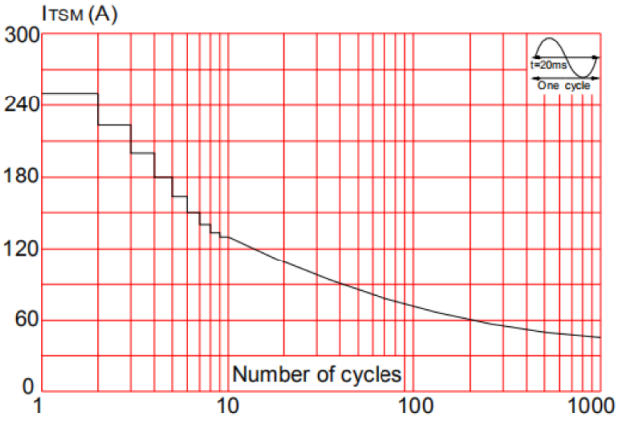



图 4：通态特征（最大值）

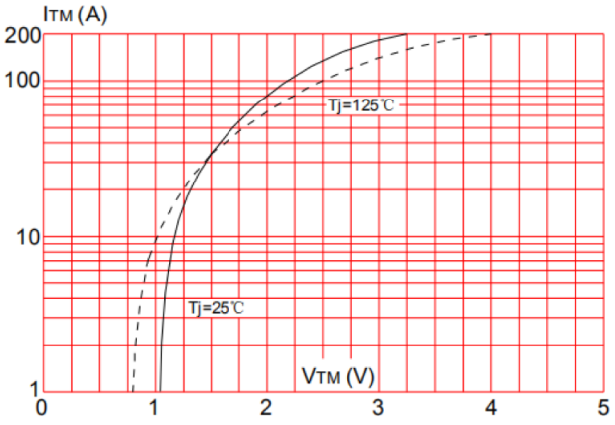
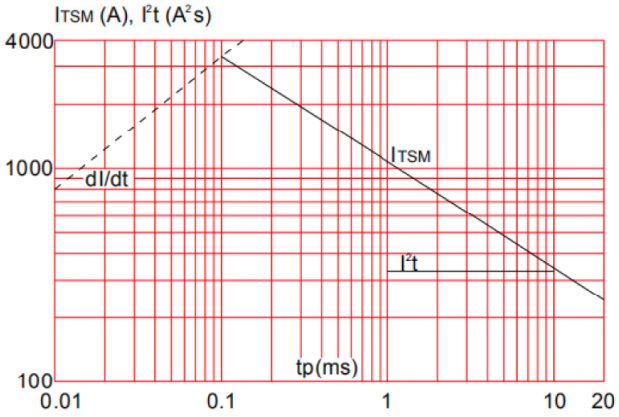
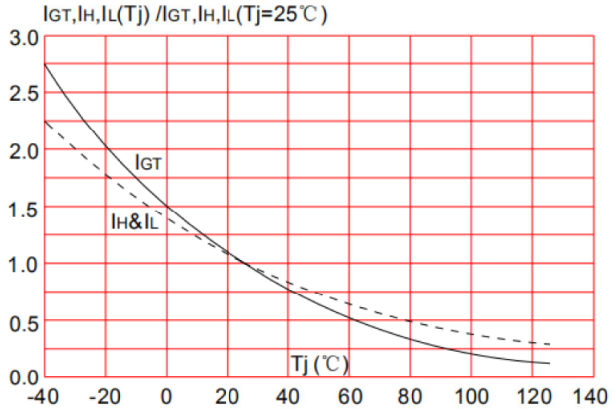



图 5：正弦波脉冲宽度 $t_p$<20ms 下的非重复浪涌电流和 $I^2t$ 的相对值

图 6：门极触发电流、维持电流和擎住电流与温度的关系



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