

|   |                |                 |
|---|----------------|-----------------|
| <b>BT134</b>  |                |                 |
|  | 双向可控硅<br>TRIAC | 版本号<br>201603-A |

## 产品概述 GENERAL DESCRIPTION

BT134 双向可控硅采用穿通隔离台面结构，复合玻璃钝化PN结表面保护工艺技术，dv/dt高，可靠性高，适用于控温、调光、马达控制。

BT134 Triacs is fabricated using separation diffusion processes ,the junction termination areas are passivated with glass. Thanks to highly dv/dt and reliability,the Triacs series is suitable for domestic lighting ,heating and motor speed controllers.

## 主要参数 MAIN CHARACTERISTICS

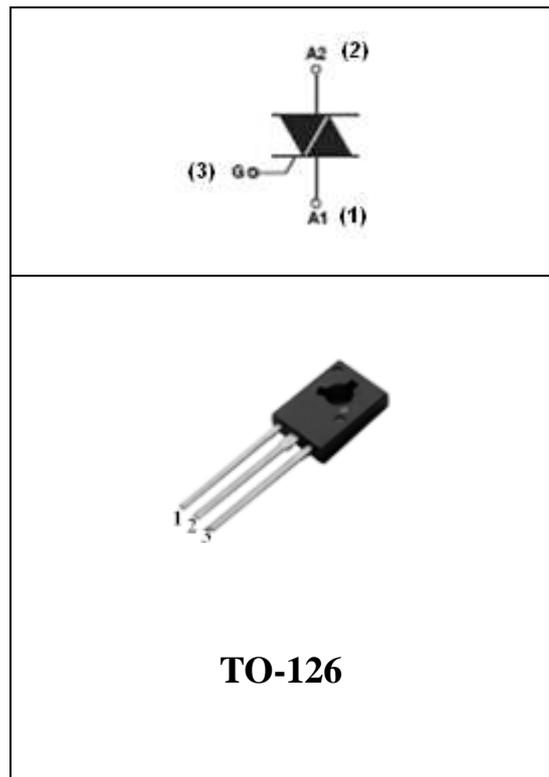
| 参数<br>Parameter   | 数值<br>Value | 单位<br>Unit |
|-------------------|-------------|------------|
| $I_{T(RMS)}$      | 4           | A          |
| $V_{DRM}/V_{RRM}$ | 600&800     | V          |
| $I_{GT(III)}$     | $\leq 25$   | mA         |

## 产品特性

- dv/dt高
- 通态压降低
- Rohs环保产品

## FEATURES

- Highly dv/dt
- Low on-state voltage
- Rohs Products



## 应用领域 APPLICATIONS

主要应用于调光、控温、马达控制。

domestic lighting ,heating and motor speed controllers.

**极限值(除非另有规定, T<sub>j</sub>=25℃) ABSOLUTE RATINGS**

 (T<sub>j</sub>=25℃, unless otherwise specified)

| 符号<br>Symbol        | 参数<br>Parameter   | 数值<br>Value                   | 单位<br>Unit           |
|---------------------|---|-------------------------------|----------------------|
| I <sub>T(RMS)</sub> | RMS 通态电流<br>RMS on-state current (full sine wave)         | T <sub>C</sub> ≤107℃          | 4 A                  |
| I <sub>TSM</sub>    | 通态峰值浪涌电流<br>Non repetitive surge peak on-state current    | F=50Hz, t=20ms                | 25 A                 |
| I <sup>2</sup> t    | I <sup>2</sup> t 耗散值<br>I <sup>2</sup> t value for fusing | T <sub>p</sub> =10ms          | 3.1 A <sup>2</sup> s |
| di/dt               | 通态电流上升值<br>Critical rate of rise of on-state current      | F=120Hz, T <sub>j</sub> =125℃ | 50 A/μs              |
| I <sub>GM</sub>     | 门极峰值电流<br>Peak gate current                               | TP=20μs, T <sub>j</sub> =125℃ | 2 A                  |
| P <sub>G(AV)</sub>  | 平均门极耗散功率<br>Average gate power dissipation                | T <sub>j</sub> =125℃          | 0.5 W                |
| T <sub>stg</sub>    | 贮存结温范围<br>Storage junction temperature range              |                               | -40~+150 ℃           |
| T <sub>j</sub>      | 工作结温范围<br>Operating junction temperature range            |                               | -40~+125 ℃           |

**电参数(除非另有规定, T<sub>j</sub>=25℃) ELECTRICAL CHARACTERISTICS**

 (T<sub>j</sub>=25℃, unless otherwise specified)

| 参数<br>Parameter                                   | 符号<br>Symbol     | 规范值<br>Value |       | 单位<br>Unit | 测试条件<br>Test Conditions                                    |
|---|------------------|--------------|-------|------------|--|
|   |                  | D            | E     |            |  |
| 触发电流<br>Gate trigger current                      | I <sub>GT</sub>  | I ~ III      | 5 10  | mA         | V <sub>D</sub> =12V, I <sub>T</sub> =0.1A                  |
|   |                  | IV           | 10 25 |            |  |
| 触发电压<br>Gate trigger voltage                      | V <sub>GT</sub>  | I ~ IV       | ≤1.5  | V          | V <sub>D</sub> =12V, I <sub>T</sub> =0.1A                  |
| 维持电流<br>Holding current                           | I <sub>H</sub>   |              | 10 20 | mA         | V <sub>D</sub> =12V, I <sub>T</sub> =0.1A                  |
| 擎住电流<br>Latching current                          | I <sub>L</sub>   | I、III        | 10 15 | mA         | V <sub>D</sub> =12V, I <sub>T</sub> =0.1A                  |
|   |                  | II、IV        | 15 20 |            |  |
| 电压上升率<br>Rise of off- state voltage               | dv/dt            |              | 5 50  | V/μS       | V <sub>D</sub> =67% V <sub>DRM</sub>                       |
| 通态压降<br>Peak on-state voltage                     | V <sub>TM</sub>  |              | 1.7   | V          | I <sub>T</sub> =5.5A                                       |
| 断态漏电流<br>Peak repetitive forward blocking current | I <sub>DRM</sub> |              | 5     | μA         | V <sub>RRM</sub> =V <sub>DRM</sub> , T <sub>j</sub> = 25 ℃ |
|   | I <sub>RPM</sub> |              | 0.8   | mA         | V <sub>RRM</sub> =V <sub>DRM</sub> , T <sub>j</sub> =125 ℃ |

**热特性 THERMAL RESISTANCES**

| 符号 Symbol | 参数 Parameter         | 数值 Value | 单位 Unit |
|-----------|----------------------|----------|---------|
| Rth(j-c)  | Junction to case(AC) | 4.1      | ℃/W     |
| Rth(j-a)  | Junction to ambient  | 100      | ℃/W     |

特征曲线 ELECTRICAL CHARACTERISTICS (CURVES)

图1 最大耗散功率与RMS通态电流关系  
Fig.1.Maximum Power Dissipation Versus on-state current

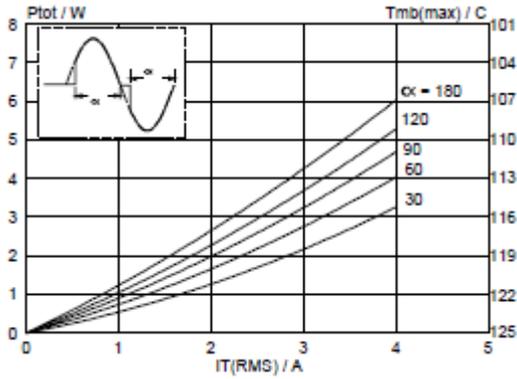


图2 RMS通态电流与Tc温度关系  
Fig.2. RMS On-state Current Versus TL

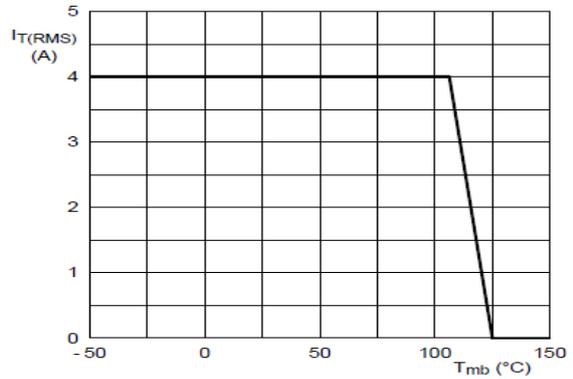


图3 通态特性  
Fig.3.On-State Characteristics

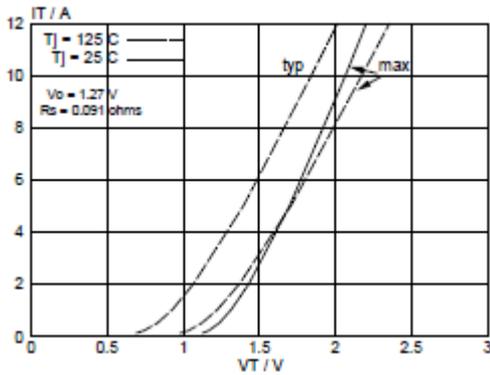


图4 通态浪涌峰值电流与周期数关系  
Fig.4.Surge Peak On-state Current Versus Number Cycles

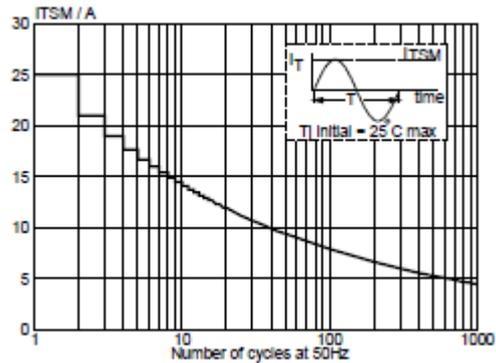
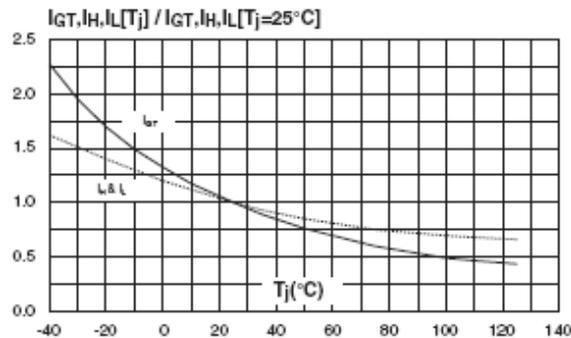
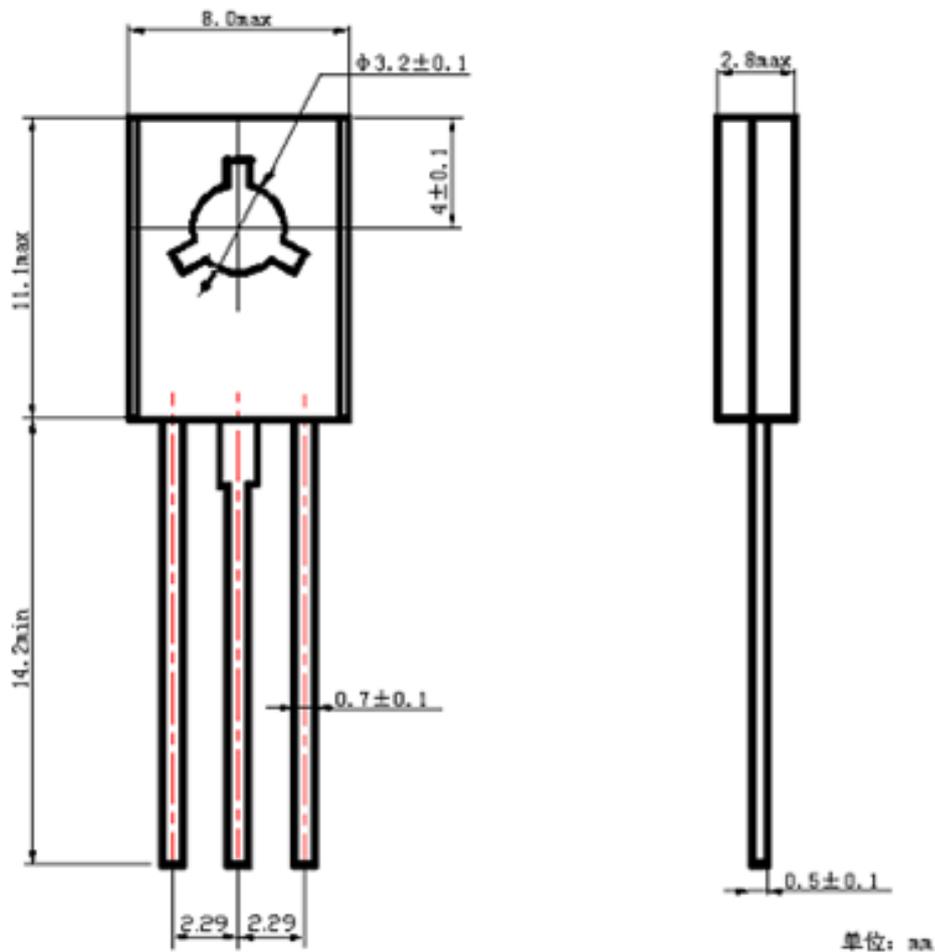


图5 IGT、IH、IL相对值（相对于25°C）与结温关系  
Fig.5.Relative Variation Of Gate Trigger Current , Holding Current And Latching Current Versus Junction Temperature (Typical Value)



封装尺寸 PACKAGE MECHANICAL DATA

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