

# BTB08

# 双向可控硅/TRIAC

用途：用于交流转换。

Purpose: For AC switching operations.

特点：高转换性能。

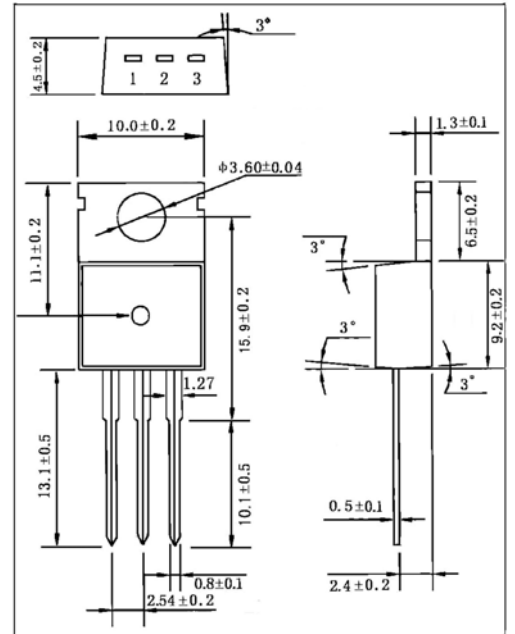
Features: High commutation performances.

极限参数/Absolute maximum ratings(Ta=25°C)

| 参数符号<br>Symbol    | 测试条件<br>Test condition                      | 数值<br>Rating | 单位<br>Unit       |
|-------------------|---|--------------|------------------|
| $V_{DRM}/V_{RRM}$ | $T_j=110^\circ\text{C}$                     | 600          | V                |
| $I_{T(RMS)}$      | $T_c=105^\circ\text{C}$                     | 8.0          | A                |
| $I_{TSM}$         | F=50Hz t=20ms                               | 80           | A                |
|                   | F=60Hz t=16.7ms                             | 84           | A                |
| $I^2t$            | tp=10ms                                     | 36           | A <sup>2</sup> s |
| dI/dt             | F=120Hz $T_j=125^\circ\text{C}$             | 50           | A/ $\mu\text{s}$ |
| $I_{GM}$          | $T_p=20\mu\text{s}$ $T_j=125^\circ\text{C}$ | 4.0          | A                |
| $P_{G(AV)}$       | $T_j=125^\circ\text{C}$                     | 1.0          | W                |
| Tstg              |   | -40~150      | °C               |
| $T_j$             |   | -40~125      | °C               |
| Rth(j-a)          |   | 60           | °C/W             |
| Rth(j-c)          | AC  | 1.6          | °C/W             |

T0-220

单位 :mm



引脚：1 T1 2 T2 3 G

电性能参数/Electrical characteristics(Ta=25°C)

| 参数符号<br>Symbol | 测试条件<br>Test condition                                   | 信号区<br>Quadrant         |       | BTA08 |     |      | 单位<br>Unit       |
|----------------|--|-------------------------|-------|-------|-----|------|------------------|
|                |  |                         |       | SW    | CW  | BW   |                  |
| $I_{GT(1)}$    | $V_D=12V$ $R_L=30\Omega$                                 | I-II-III                | MAX.  | 10    | 35  | 50   | mA               |
| $V_{GT}$       |  | I-II-III                | MAX.  | 1.3   |     |      | V                |
| $V_{GD}$       | $V_D=V_{DRM}$ $R_L=3.3K\Omega$ $T_j=125^\circ\text{C}$   | I-II-III                | MIN.  | 0.2   |     |      | V                |
| $I_H(2)$       | $I_T=500\text{mA}$                                       |                         | MAX.  | 15    | 35  | 50   | mA               |
| $I_L$          |  | $I_G=1.2I_{GT}$         | I-III | MAX.  | 25  | 50   | 70               |
|                | II   |                         | MAX.  | 30    | 60  | 80   |                  |
| $V_T(2)$       | $I_{TM}=11A$ $t_p=380\mu\text{s}$ $T_j=25^\circ\text{C}$ |                         | MAX.  | 1.55  |     |      | V                |
| $V_{to}(2)$    | Threshold voltage $T_j=125^\circ\text{C}$                |                         | MAX.  | 0.85  |     |      | V                |
| $R_d(2)$       | Dynamic resistance $T_j=125^\circ\text{C}$               |                         | MAX.  | 50    |     |      | m $\Omega$       |
| $I_{DRM}$      | $V_{DRM}$ rated  | $T_j=25^\circ\text{C}$  | MAX.  | 5.0   |     |      | $\mu\text{A}$    |
| $I_{RRM}$      | $V_{RRM}$ rated  | $T_j=125^\circ\text{C}$ | MAX.  | 1.0   |     |      | mA               |
| (dV/dt) (2)    | $V_D=67\% V_{DRM}$ gate open $T_j=125^\circ\text{C}$     |                         | MIN.  | 40    | 400 | 1000 | V/ $\mu\text{s}$ |
| (dI/dt)c (2)   | (dV/dt)c=0.1V/ $\mu\text{s}$ $T_j=125^\circ\text{C}$     |                         | MIN.  | 5.4   | -   | -    | A/ms             |

Note 1: minimum  $I_{GT}$  is guaranteed 5% of  $I_{GT}$  max.

Note 2: for both polarities of T2 referenced to T1.

