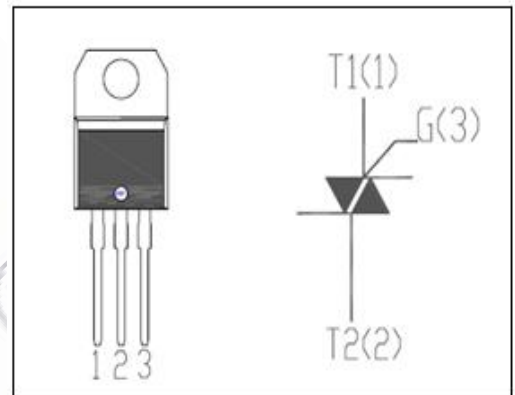


**isc Thyristors**
**BTA04-400T**
**DESCRIPTION**

- With TO-220 packaging
- Operating in 4 quadrants
- High commutation capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Switching applications
- Phase control
- Static switching on inductive or resistive load


**ABSOLUTE MAXIMUM RATINGS (T<sub>a</sub>=25°C)**

| SYMBOL              | PARAMETER  |              | MAX      | UNIT |
|---------------------|--|--------------|----------|------|
| V <sub>DRM</sub>    | Repetitive peak off-state voltage                        |              | 400      | V    |
| V <sub>RRM</sub>    | Repetitive peak reverse voltage                          |              | 400      | V    |
| I <sub>T(RSM)</sub> | Average on-state current                                 |              | 4        | A    |
| I <sub>TSM</sub>    | Surge non-repetitive on-state current                    | 50HZ<br>60HZ | 40<br>42 | A    |
| P <sub>G(AV)</sub>  | Average gate power dissipation ( over any 20 ms period ) |              | 0.5      | W    |
| T <sub>j</sub>      | Operating junction temperature                           |              | -40~110  | °C   |
| T <sub>stg</sub>    | Storage temperature                                      |              | -40~150  | °C   |

**ELECTRICAL CHARACTERISTICS (T<sub>c</sub>=25°C unless otherwise specified)**

| SYMBOL                 | PARAMETER                         | CONDITIONS   |   | MIN | MAX          | UNIT |
|------------------------|-----------------------------------|--|---|-----|--------------|------|
| I <sub>RRM</sub>       | Repetitive peak reverse current   | V <sub>R</sub> =V <sub>RRM</sub> Rated;<br>V <sub>D</sub> =V <sub>DRM</sub> Rated; | T <sub>j</sub> =25°C<br>T <sub>j</sub> =125°C |     | 0.01<br>0.75 | mA   |
| I <sub>DRM</sub>       | Repetitive peak off-state current |  |   |     |              |      |
| V <sub>TM</sub>        | On-state voltage                  | I <sub>T</sub> =5.5A   |   |     | 1.65         | V    |
| I <sub>GT</sub>        | Gate-trigger current              | V <sub>D</sub> =12V;RL=33 Ω  | I   |     | 5            | mA   |
|                        |                                   |  | II  |     | 5            |      |
|                        |                                   |  | III   |     | 5            |      |
|                        |                                   |  | IV  |     | 5            |      |
| V <sub>GT</sub>        | Gate-trigger voltage              | V <sub>D</sub> =12V;RL=33 Ω  |   |     | 1.5          | V    |
| R <sub>th (j-mb)</sub> | Junction to mounting base         | Half cycle   |   |     | 4.4          | °C/W |