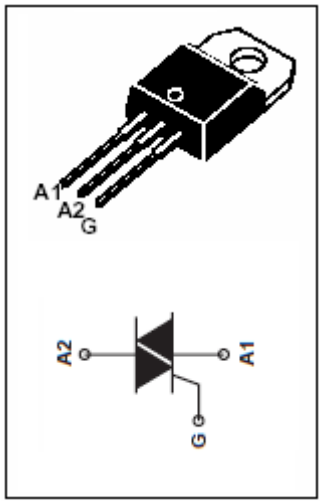
# isc Triacs BTA12-600C

## FEATURES

- With TO-220AB insulated package
- Suitables for general purpose AC switching. Which can be used as an ON/OFF function in applications such as static relays, heating regulation, induction motor starting circuits. Or for phase control operation in light dimmers, motor speed controllers etc.

## ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

| SYMBOL | PARAMETER | MIN | UNIT |
|---|---|---|---|
| $V_{DRM}$ | Repetitive peak off-state voltage | 600 | V |
| $V_{RRM}$ | Repetitive peak reverse voltage | 600 | V |
| $I_{T(RMS)}$ | RMS on-state current (full sine wave)$T_j$=90℃ | 12 | A |
| $I_{TSM}$ | Non-repetitive peak on-state current $t_p$=20ms | 120 | A |
| $T_j$ | Operating junction temperature | 110 | ℃ |
| $T_{stg}$ | Storage temperature | -45~150 | ℃ |
| $R_{th(j-c)}$ | Thermal resistance, junction to case | 2.3 | ℃/W |
| $R_{th(j-a)}$ | Thermal resistance, junction to ambient | 60 | ℃/W |




## ELECTRICAL CHARACTERISTICS ($T_C$=25℃ unless otherwise specified)

| SYMBOL | PARAMETER | | CONDITIONS | MAX | UNIT |
|---|---|---|---|---|---|
| $I_{RRM}$ | Repetitive peak reverse current | | $V_R=V_{RRM}$,<br>$V_R=V_{RRM}$, Tj=110℃ | 0.01<br>0.5 | mA |
| $I_{DRM}$ | Repetitive peak off-state current | | $V_D=V_{DRM}$,<br>$V_D=V_{DRM}$, Tj=110℃ | 0.01<br>0.5 | mA |
| $I_{GT}$ | Gate trigger current | Ⅰ | $V_D$=12V; $R_L$= 30Ω | 25 | mA |
| | | Ⅱ | | 25 | |
| | | Ⅲ | | 25 | |
| | | Ⅳ | | 50 | |
| $I_H$ | Holding current | | $I_{GT}$= 0.5A, Gate Open | 25 | mA |
| $V_{GT}$ | Gate trigger voltage all quadrant | | $V_D$=12V; $R_L$= 30Ω | 1.3 | V |
| $V_{TM}$ | On-state voltage | | $I_T$= 17A; $t_p$= 380μs | 1.55 | V |