

## isc Triacs

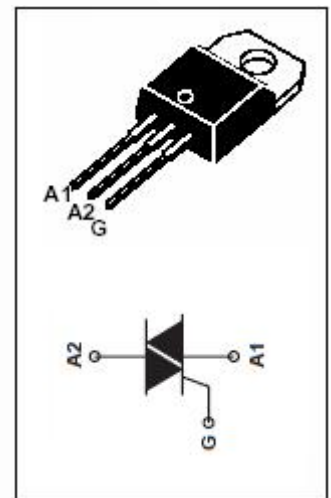
## BTA24-600CW

## FEATURES

- With TO-220AB insulated package
  - Suitable for general purpose where high surge current capability is required.
- Application such as phase control and static switching on inductive or resistive load.

## ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

| 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) $T_j=90^{\circ}\text{C}$ | 25      | A                    |
| $I_{TSM}$     | Non-repetitive peak on-state current $t_p=8.3\text{ms}$        | 260     | A                    |
| $T_j$         | Operating junction temperature                                 | 125     | $^{\circ}\text{C}$   |
| $T_{stg}$     | Storage temperature                                            | -45~150 | $^{\circ}\text{C}$   |
| $P_{G(AV)}$   | Average gate power dissipation( $T_j=125^{\circ}\text{C}$ )    | 1       | W                    |
| $R_{th(j-c)}$ | Thermal resistance, junction to case                           | 1.5     | $^{\circ}\text{C/W}$ |
| $R_{th(j-a)}$ | Thermal resistance, junction to ambient                        | 50      | $^{\circ}\text{C/W}$ |


ELECTRICAL CHARACTERISTICS ( $T_c=25^{\circ}\text{C}$  unless otherwise specified)

| SYMBOL    | PARAMETER                         | CONDITIONS                                                   | MAX         | UNIT |
|-----------|-----------------------------------|--------------------------------------------------------------|-------------|------|
| $I_{RRM}$ | Repetitive peak reverse current   | $V_R=V_{RRM}$ ,<br>$V_R=V_{RRM}$ , $T_j=125^{\circ}\text{C}$ | 0.01<br>3.0 | mA   |
| $I_{DRM}$ | Repetitive peak off-state current | $V_D=V_{DRM}$ ,<br>$V_D=V_{DRM}$ , $T_j=125^{\circ}\text{C}$ | 0.01<br>3.0 | mA   |
| $I_{GT}$  | Gate trigger current              | I                                                            | 35          | mA   |
|           |                                   | II                                                           | 35          |      |
|           |                                   | III                                                          | 35          |      |
| $I_H$     | Holding current                   | $I_{GT}=0.5\text{A}$ , Gate Open                             | 50          | mA   |
| $V_{GT}$  | Gate trigger voltage all quadrant | $V_D=12\text{V}$ ; $R_L=33\Omega$                            | 1.3         | V    |
| $V_{TM}$  | On-state voltage                  | $I_T=35\text{A}$ ; $t_p=380\mu\text{s}$                      | 1.55        | V    |