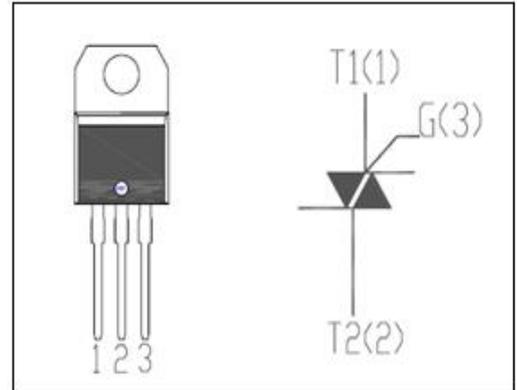


isc Thyristors
BTA16-700B
DESCRIPTION

- 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_a=25°C)

| SYMBOL | PARAMETER | MAX | UNIT |
|---------------------|---|------------|------|
| V _{DRM} | Repetitive peak off-state voltage | 700 | V |
| V _{RRM} | Repetitive peak reverse voltage | 700 | V |
| I _{T(RSM)} | Average on-state current T _c =80°C | 16 | A |
| I _{TSM} | Surge non-repetitive on-state current | 160 170 | A |
| P _{G(AV)} | Average gate power dissipation (over any 20 ms period) T _j =125°C | 1 | W |
| T _j | Operating junction temperature | -40~125 | °C |
| T _{stg} | Storage temperature | -40~150 | °C |

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

| SYMBOL | PARAMETER | CONDITIONS | | MIN | MAX | UNIT |
|---------------|-----------------------------------|--|---|-----|-----|---------------------------|
| I_{RRM} | Repetitive peak reverse current | $V_R=V_{RRM}$ Rated; $V_D=V_{DRM}$ Rated; | $T_j=25^\circ\text{C}$ $T_j=125^\circ\text{C}$ | | 10 | μA |
| I_{DRM} | Repetitive peak off-state current | | | | | |
| V_{TM} | On-state voltage | $I_T=22.5\text{A}; t_p=380\ \mu\text{s}$ | | | 1.6 | V |
| I_{GT} | Gate-trigger current | $V_D=12\text{V}; R_L=33\Omega;$ | I | | 50 | mA |
| | | | II | | 50 | |
| | | | III | | 50 | |
| | | | IV | | 100 | |
| V_{GT} | Gate-trigger voltage | $V_D=12\text{V}; R_L=33\Omega;$ | | | 1.5 | V |
| $R_{th(j-c)}$ | Junction to case | | | | 2.9 | $^\circ\text{C}/\text{W}$ |

NOTICE:

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