

isc Thyristors

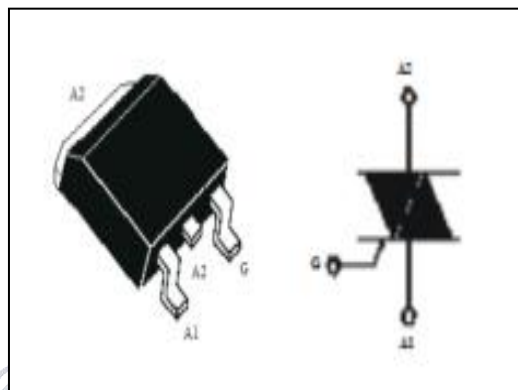
BTA316B-800C

DESCRIPTION

- With TO-263(D2PAK) 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($T_a=25^{\circ}\text{C}$)

| SYMBOL | PARAMETER | | MAX | UNIT |
|---------------------|--|--------------|------------|--------------------|
| V_{DRM} | Repetitive peak off-state voltage | | 800 | V |
| V_{RRM} | Repetitive peak reverse voltage | | 800 | V |
| $I_{\text{T(RSM)}}$ | Average on-state current | | 16 | A |
| I_{TSM} | Surge non-repetitive on-state current | 50HZ 60HZ | 140 160 | A |
| $P_{\text{G(AV)}}$ | Average gate power dissipation (over any 20 ms period) | | 0.5 | W |
| T_j | Operating junction temperature | | -40~125 | $^{\circ}\text{C}$ |
| T_{stg} | Storage temperature | | -40~150 | $^{\circ}\text{C}$ |

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 =150℃ | | 8.5 | mA |
| I _{DRM} | Repetitive peak off-state current | | | | | |
| V _{TM} | On-state voltage | I _T =18A | | | 1.5 | V |
| I _{GT} | Gate-trigger current | V _D =12V;I _T =0.1A | I | | 35 | mA |
| | | | II | | 35 | |
| | | | III | | 35 | |
| | | | IV | | 70 | |
| V _{GT} | Gate-trigger voltage | V _D =12V;I _T =0.1A | | | 1.5 | V |
| R _{th} (j-mb) | Junction to mounting base | Half cycle | | | 1.7 | ℃/W |

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