

isc Thyristors

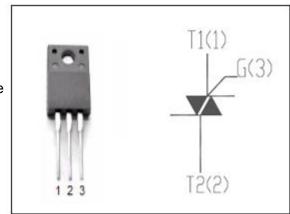
BCR16FM-12LB

DESCRIPTION

- · With TO-220F packaging
- Operating in 3 quadrants
- · High commutation capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- · Solid state relays; heating and cooking appliances
- · Switching applications



ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

| | The material section (12 20 c) | | | |
|--------------------|--|--------|------|---------------|
| SYMBOL | PARAMETER | MAX | UNIT | |
| V _{DRM} | Repetitive peak off-state voltage | | | V |
| V_{RRM} | Repetitive peak reverse voltage | | | V |
| I _{T(AV)} | Average on-state current | Tc=98℃ | 16 | А |
| I _{TSM} | Surge non-repetitive on-state current | 60HZ | 160 | Α |
| P _{G(AV)} | Average gate power dissipation (over any 20 ms period) | | | W |
| Tj | Operating junction temperature | | | $^{\circ}$ |
| T_{stg} | Storage temperature | | | ${\mathbb C}$ |



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ELECTRICAL CHARACTERISTICS (Tc=25℃ unless otherwise specified)

| SYMBOL | PARAMETER | CONDITIONS | | | MIN | MAX | UNIT |
|------------------|-----------------------------------|--|---|----|-----|-----|------|
| I _{RRM} | Repetitive peak reverse current | V _R =V _{RRM} Rated; | / _R =V _{RRM} Rated: | | | | |
| I _{DRM} | Repetitive peak off-state current | V _D =V _{DRM} Rated; | Tj=150° | C | | 2.0 | mA |
| V_{TM} | On-state voltage | I _T =25A | | | | 1.5 | V |
| I _{GT} | Gate-trigger current | $V_D = 6V; R_L = 6 \Omega; R_G = 330 \Omega$ II III | | | 30 | | |
| | | | | II | | 30 | mA |
| | | | | | 30 | | |
| V _{GT} | Gate-trigger voltage | V_D =6V;R _L =6 Ω ;R _G =330 Ω | | | | 1.5 | V |
| Rth (j-c) | Junction to case | 4 | | | | 2.9 | °C/W |



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