

isc Thyristors

INCHANGE SEMICONDUCTOR

BCR8PM-14LG

T1(1)

T2(2)

123

G(3)

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°C)

| SYMBOL | PARAMETER | | | UNIT |
|--------------------|--|---------|----|------|
| V _{DRM} | Repetitive peak off-state voltage Tj= | Tj=150℃ | | V |
| V _{RRM} | Repetitive peak reverse voltage | | | V |
| I _{T(AV)} | Average on-state current | | | А |
| I _{TSM} | Surge non-repetitive on-state current | 60HZ | 80 | A |
| P _{G(AV)} | Average gate power dissipation (over any 20 ms period) | | | W |
| Tj | Operating junction temperature | | | °C |
| T _{stg} | Storage temperature | | | °C |



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| SYMBOL | PARAMETER | CONDITIONS | | | MIN | МАХ | UNIT |
|------------------|-----------------------------------|---|--|-----|-----|-----|-------------|
| I _{RRM} | Repetitive peak reverse current | V _R =V _{RRM} Rated; | | | | 2.0 | mA |
| I _{DRM} | Repetitive peak off-state current | $V_D = V_{DRM}$ Rated; $T_j = 15$ | | C | | | |
| V _{TM} | On-state voltage | I _T =12A | | | | 1.6 | V |
| I _{GT} | Gate-trigger current | ν _D =6V;R _L =6 Ω ;R _G =330 Ω | | Ι | | 30 | mA |
| | | | | II | | 30 | |
| | | III | | | | 30 | |
| V _{GT} | Gate-trigger voltage | V _D =6V;R _L =6 Ω ;R _G =3 | | 1.5 | V | | |
| Rth (j-c) | Junction to case | Half cycle | | | | 4.3 | ℃ /W |

ELECTRICAL CHARACTERISTICS (Tc=25°C unless otherwise specified)

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