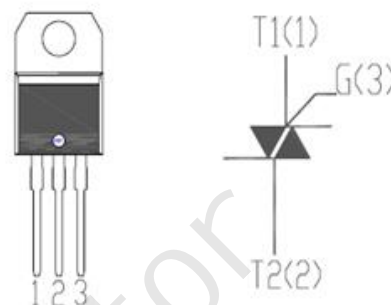


FEATURES

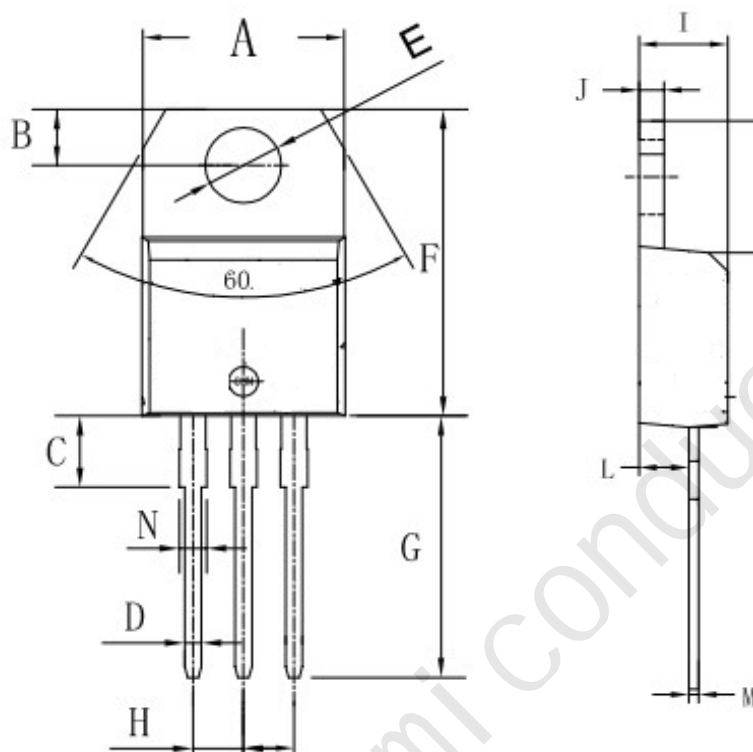
- With TO-220AB insulated package
- Suitable for general purpose AC switching. Which can be used as an ON/OFF function in applications such as static relays, heating regulation, induction motor starting circuits. Or for phase control operation in light dimmers, motor speed controllers etc.
- Minimum Lot-to-Lot variations for robust device performance and reliable operation


ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

| SYMBOL | PARAMETER | MIN | UNIT |
|----------------------|--|---------|------|
| V _{DRM} | Repetitive peak off-state voltage | 800 | V |
| V _{RRM} | Repetitive peak off-state voltage | 800 | V |
| I _{T(RMS)} | RMS on-state current (full sine wave) T _j =80°C | 16 | A |
| I _{TSM} | Non-repetitive peak on-state current t _p =20ms | 160 | A |
| T _j | Operating junction temperature | 125 | °C |
| T _{stg} | Storage temperature | -40~150 | °C |
| R _{th(j-c)} | Thermal resistance, junction to case | 2.9 | °C/W |
| R _{th(j-a)} | Thermal resistance, junction to ambient | 60 | °C/W |

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

| SYMBOL | PARAMETER | CONDITIONS | CW | BW | UNIT | |
|------------------|-----------------------------------|---|-----------|-----------|------|----|
| I _{RRM} | Repetitive peak reverse current | V _R =V _{RRM} , T _j =25°C V _R =V _{RRM} , T _j =125°C | 0.01 2 | 0.01 2 | mA | |
| I _{DRM} | Repetitive peak off-state current | V _D =V _{DRM} , T _j =25°C V _D =V _{DRM} , T _j =125°C | 0.01 2 | 0.01 2 | mA | |
| I _{GT} | Gate trigger current | V _D =12V; R _L = 33 Ω | I | 35 | 50 | mA |
| | | | II | 35 | 50 | |
| | | | III | 35 | 50 | |
| I _H | Holding current | I _{GT} = 0.5A, Gate Open | 35 | 50 | mA | |
| V _{GT} | Gate trigger voltage all quadrant | V _D =12V; R _L = 33 Ω | 1.3 | 1.3 | V | |
| V _{TM} | On-state voltage | I _T = 22.5A; t _p = 380 μs | 1.6 | 1.6 | V | |

TO-220AB PACKAGE OUTLINE DIMENSIONS


| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|--------|---------------------------|------|----------------------|-------|
| | Min | Max | Min | Max |
| A | 9.8 | 10.4 | 0.385 | 0.409 |
| B | 2.65 | 3.1 | 0.104 | 0.122 |
| C | 2.8 | 4.2 | 0.110 | 0.165 |
| D | 0.7 | 0.92 | 0.027 | 0.036 |
| E | 3.75 | 3.95 | 0.147 | 0.155 |
| F | 14.8 | 16.1 | 0.582 | 0.633 |
| G | 13.05 | 13.6 | 0.513 | 0.535 |
| H | 2.4 | 2.7 | 0.094 | 0.106 |
| I | 4.38 | 4.61 | 0.172 | 0.181 |
| J | 1.15 | 1.36 | 0.045 | 0.053 |
| K | 5.85 | 6.82 | 0.230 | 0.268 |
| L | 2.35 | 2.75 | 0.092 | 0.108 |
| M | 0.35 | 0.65 | 0.013 | 0.025 |
| N | 1.18 | 1.42 | 0.046 | 0.055 |