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# Triacs

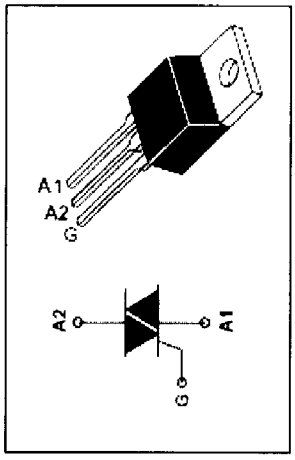
# TIC246N

## FEATURES

- With TO-220 package
- Sensitive Gate Triacs
- Glass Passivated
- Max $I_{GT}$ of 50 mA (Quadrants 1~3)

## ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

| SYMBOL | PARAMETER | MIN | UNIT |
|---|---|---|---|
| $V_{DRM}$ | Repetitive peak off-state voltage | 800 | V |
| $V_{RRM}$ | Repetitive peak reverse voltage | 800 | V |
| $I_{T(RMS)}$ | RMS on-state current (full sine wave)$T_C$=70℃ | 16 | A |
| $I_{TSM}$ | Non-repetitive peak on-state current | 125 | A |
| $T_j$ | Operating junction temperature | 110 | ℃ |
| $T_{stg}$ | Storage temperature | -45~125 | ℃ |
| $R_{th(j-c)}$ | Thermal resistance, junction to case | 1.9 | ℃/W |
| $R_{th(j-a)}$ | Thermal resistance, junction to ambient | 62.5 | ℃/W |




## ELECTRICAL CHARACTERISTICS ($T_C$=25℃ unless otherwise specified)

| SYMBOL | PARAMETER | | CONDITIONS | TYP. | MAX | UNIT |
|---|---|---|---|---|---|---|
| $I_{DRM}$ | Repetitive peak off-state current | | $V_D$=$V_{DRM}$, $T_C$=110℃ | | 2.0 | mA |
| $I_{GT}$ | Gate trigger current | I | $V_{supply}$ = 12 V†; $R_L$= 10Ω; $t_{p(g)}$ >20μs | 12 | 50 | mA |
| | | II | | 19 | 50 | |
| | | III | | 16 | 50 | |
| | | IV | | 34 | | |
| $I_H$ | Holding current | | $V_{supply}$ = 12 V†,$I_G$= 0 initial $I_{TM}$=100mA | | 40 | mA |
| $V_{GT}$ | Gate trigger voltage**all quadrant** | | $V_{supply}$ = 12 V†; $R_L$= 10Ω; $t_{p(g)}$ >20μs | | 2 | V |
| $V_{TM}$ | On-state voltage | | $I_T$= 22.5A; $I_G$= 50mA | | 1.7 | V |