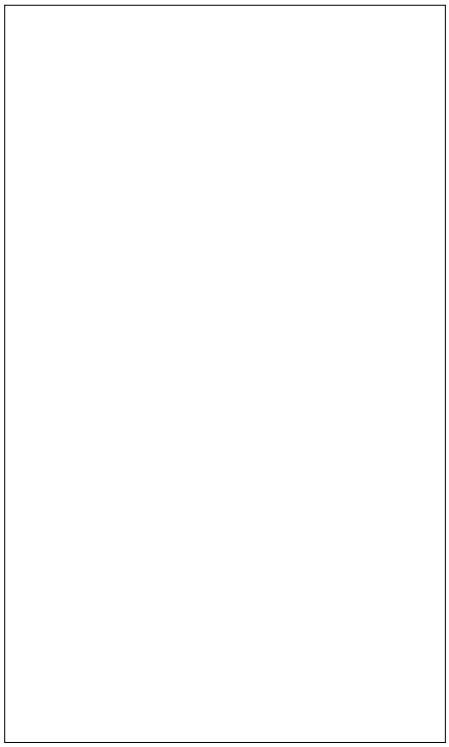
# ACJT810-10K 8A TRIAC

Rev.A.1.2

## DESCRIPTION:

The ACJT810-10K triac is suitable for general purpose AC switching. It can be used as an ON/OFF function in applications such as heating regulation, induction motor starting circuits, for phase control operation in light dimmers, motor speed controllers. The ACJT810-10K embeds a TVS structure to absorb the inductive turn-off energy such as those described in the IEC 61000-4-5 standards. Package TO-252 is RoHS compliant.



## MAIN FEATURES

| Symbol | Value | Unit |
|---|---|---|
| $I_{T(RMS)}$ | 8 | A |
| $V_{DRM}$ /$V_{RRM}$ | 1000 | V |

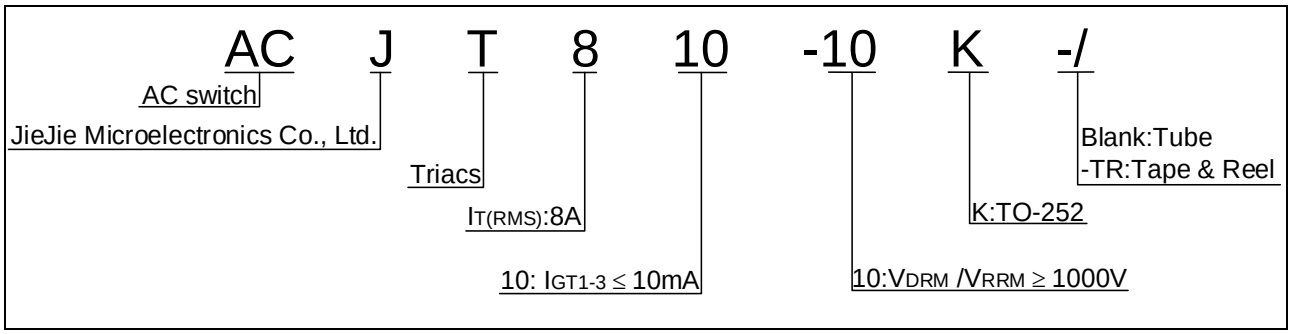
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## ABSOLUTE MAXIMUM RATINGS

| Parameter | Symbol | Value | Unit |
|---|---|---|---|
| Storage junction temperature range | $T_{stg}$ | -40-150 | |
| Operating junction temperature range | $T_j$ | -40-125 | |
| Repetitive peak off-state voltage ($T_j$=25 ) | $V_{DRM}$ | 1000 | V |
| Repetitive peak reverse voltage ($T_j$=25 ) | $V_{RRM}$ | 1000 | V |
| RMS on-state current ($T_C \leq$ 107 ) | $I_{T(RMS)}$ | 8 | A |
| Non repetitive surge peak on-state current (full cycle , $t_p$=20ms , $T_j$=25 ) | $I_{TSM}$ | 80 | A |
| Non repetitive surge peak on-state current (full cycle , $t_p$=16.6ms , $T_j$=25 ) | | 88 | |
| $I^2t$ value for fusing ($t_p$=10ms , $T_j$=25 ) | $I^2t$ | 32 | $A^2s$ |
| Critical rate of rise of on-state current ($I_G$=2 × $I_{GT}$ , f=100Hz , $T_j$=125 ) | dI/dt | 100 | A/μs |
| Peak gate current ($t_p$=20μs , $T_j$=125 ) | $I_{GM}$ | 4 | A |
| Average gate power dissipation ($T_j$=125 ) | $P_{G(AV)}$ | 0.5 | W |
| Peak gate power | $P_{GM}$ | 10 | W |

# ACJT810-10K

## ORDERING INFORMATION




## MARKING

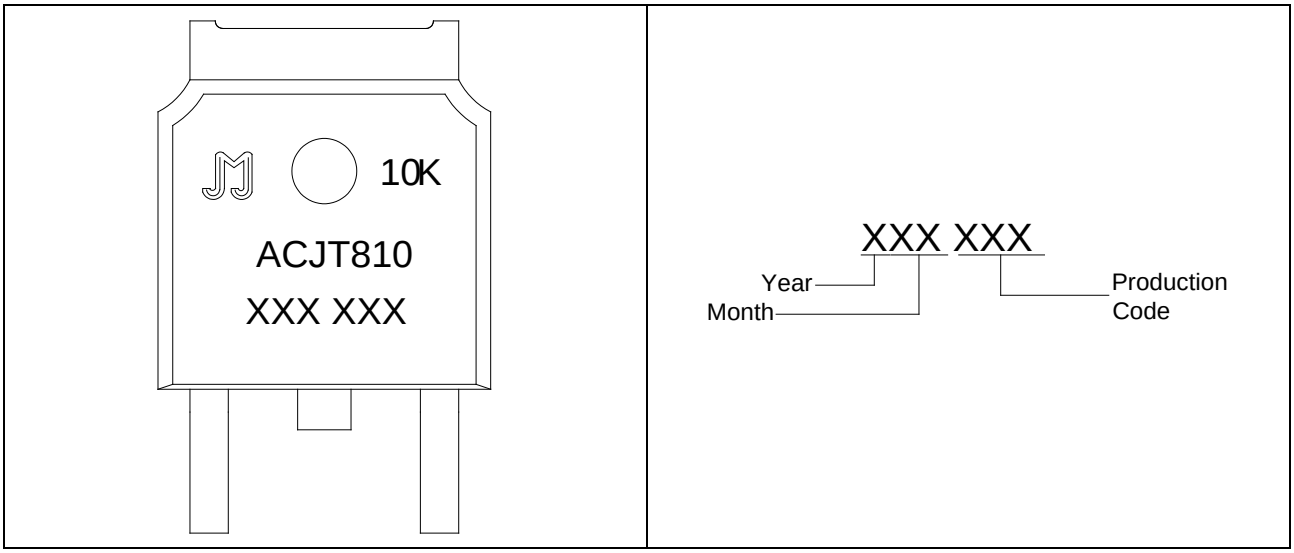
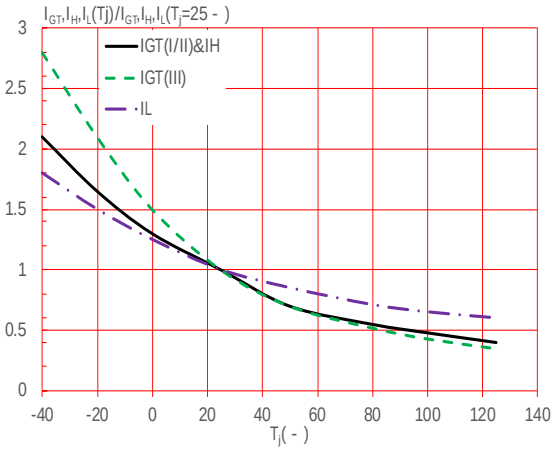
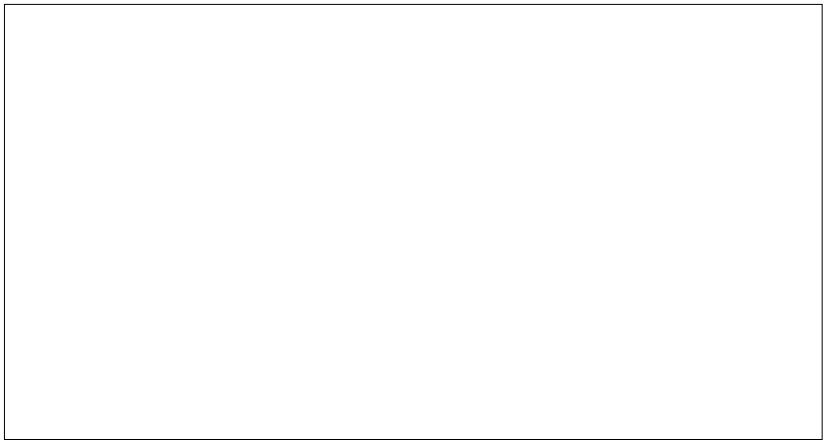


**FIG.7:** Relative variations of gate trigger current, holding current and latching current versus junction temperature



## PACKAGE MECHANICAL DATA

| Ref. | Dimensions | | | | | |
|---|---|---|---|---|---|---|
| | Millimeters | | | Inches | | |
| | Min. | Typ. | Max. | Min. | Typ. | Max. |
| A | 2.10 | | 2.50 | 0.083 | | 0.098 |
| A2 | 0 | | 0.15 | 0 | | 0.006 |
| B | 0.66 | | 0.86 | 0.026 | | 0.034 |
| C | 0.40 | | 0.60 | 0.016 | | 0.024 |
| D | 5.90 | | 6.30 | 0.232 | | 0.248 |
| E | 6.40 | | 6.80 | 0.252 | | 0.268 |
| G | 4.47 | | 4.67252 | | | 0.268 |
| G1 | 2.18 | | 2.38 | 0.086 | | 0.094 |
| L | | | | | | |
| L2 | | | | 0.053 | | 0.065 |



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