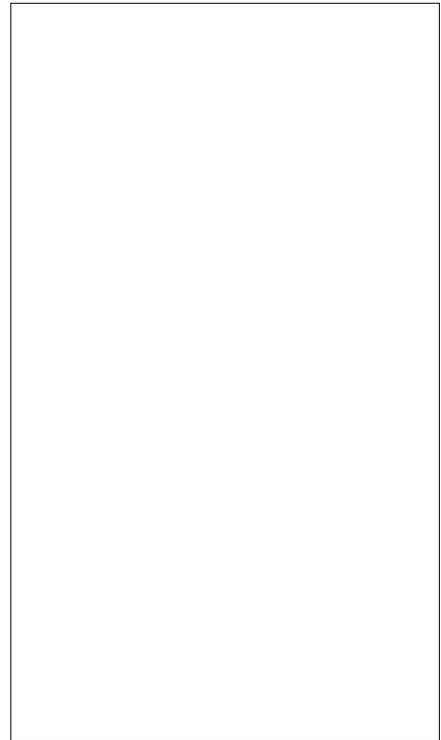




ACJT02K-1000SW 2A TRIAC

Rev.A.1.1

The ACJT02K-1000SW 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 ACJT02K-1000SW 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.



| 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 ($T_j=25^\circ\text{C}$) | V_{DRM} | 1000 | V |
| Repetitive peak reverse voltage ($T_j=25^\circ\text{C}$) | V_{RRM} | 1000 | V |
| RMS on-state current ($T_c = 107^\circ\text{C}$) | $I_{T(RMS)}$ | 2 | A |
| Non repetitive surge peak on-state current (full cycle, $t_p=20\text{ms}$, $T_j=25^\circ\text{C}$) | I_{TSM} | 25 | A |
| Non repetitive surge peak on-state current (full cycle, $t_p=16.6\text{ms}$, $T_j=25^\circ\text{C}$) | | 27.5 | |
| I^2t value for fusing ($t_p=10\text{ms}$, $T_j=25^\circ\text{C}$) | I^2t | 3.125 | A^2s |
| Critical rate of rise of on-state current ($I_G=2 I_{GT}$, $f=100\text{Hz}$, $T_j=125^\circ\text{C}$) | di/dt | 100 | A/s |

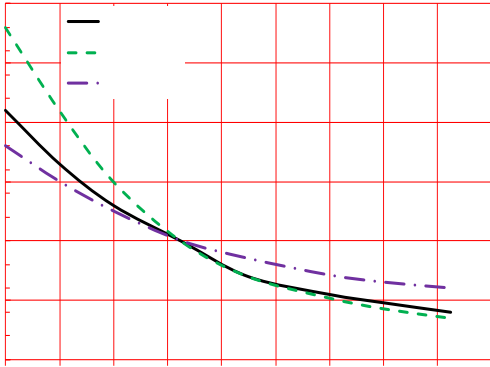
| | | | |
|--|----------|------|----|
| Peak pulse voltage ($T_j=25$; non-repetitive, off-state; FIG.8) | V_{pp} | 4.75 | kV |
|--|----------|------|----|

($T_j=25$ unless otherwise specified)

| Symbol | Test Condition | Quadrant | Value | | Unit |
|----------|---------------------------------------|----------|-------|-----|------|
| I_{GT} | $V_D=12V$ $R_L=33$ | - - | MAX. | 10 | mA |
| V_{GT} | | - - | MAX. | 1 | V |
| V_{GD} | $V_D=V_{DRM}$ $T_j=125$ $R_L=3.3k$ | - - | MIN. | 0.2 | V |

AC J T 02 K -1000 SW -/

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



ACJT02K-1000SW

JieJie Microelecicr00S

Dimensions

Millimeters

lh5.746 -i

