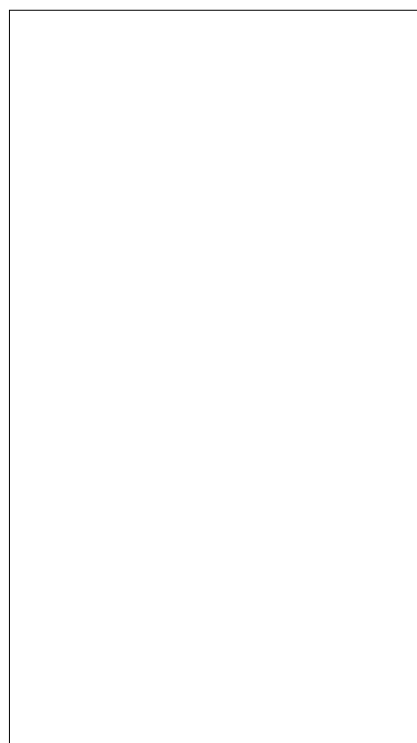


## DESCRIPTION:

The ACJT08K-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 ACJT08K-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.



## MAIN FEATURES

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

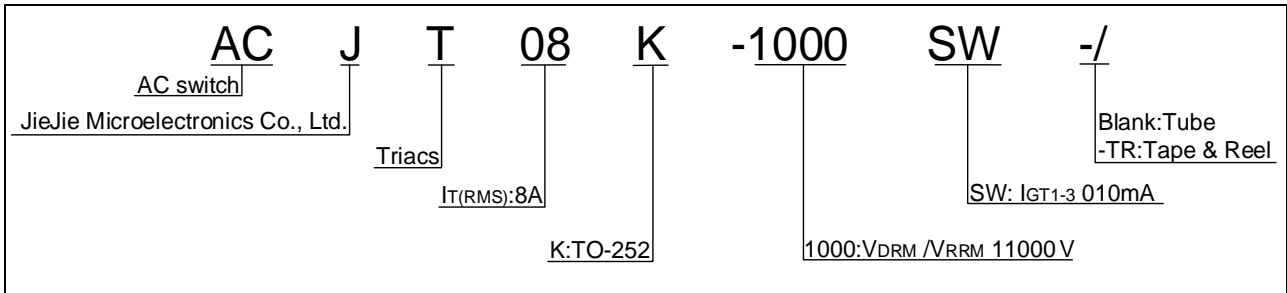
I

## 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 ( $T_j=25^\circ\text{C}$ )   | $V_{DRM}$    | 1000    | V                    |
| Repetitive peak reverse voltage ( $T_j=25^\circ\text{C}$ )   | $V_{RRM}$    | 1000    | V                    |
| RMS on-state current ( $T_c 0106^\circ\text{C}$ )  | $I_{T(RMS)}$ | 8       | A                    |
| Non repetitive surge peak on-state current (full cycle, $t_p=20\text{ms}$ , $T_j=25^\circ\text{C}$ )             | $I_{TSM}$    | 80      | A                    |
| Non repetitive surge peak on-state current (full cycle, $t_p=16.6\text{ms}$ , $T_j=25^\circ\text{C}$ )           |              | 88      |                      |
| $I^2t$ value for fusing ( $t_p=10\text{ms}$ , $T_j=25^\circ\text{C}$ )   | $I^2t$       | 32      | $\text{A}^2\text{s}$ |
| Critical rate of rise of on-state current ( $I_G=2 \times I_{GT}$ , $f=100\text{Hz}$ , $T_j=125^\circ\text{C}$ ) | $di/dt$      | 100     | $\text{A/s}$         |
| Peak gate current ( $t_p=20\text{ }\mu\text{s}$ , $T_j=125^\circ\text{C}$ )                                      | $I_{GM}$     | 4       | A                    |
| Average gate power dissipation ( $T_j=125^\circ\text{C}$ )   | $P_{G(AV)}$  | 0.5     | W                    |
| Peak gate power  | $P_{GM}$     | 10      | W                    |



ORDERING INFORMATION



MARKING

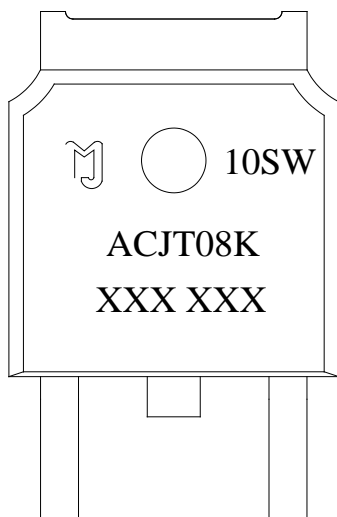
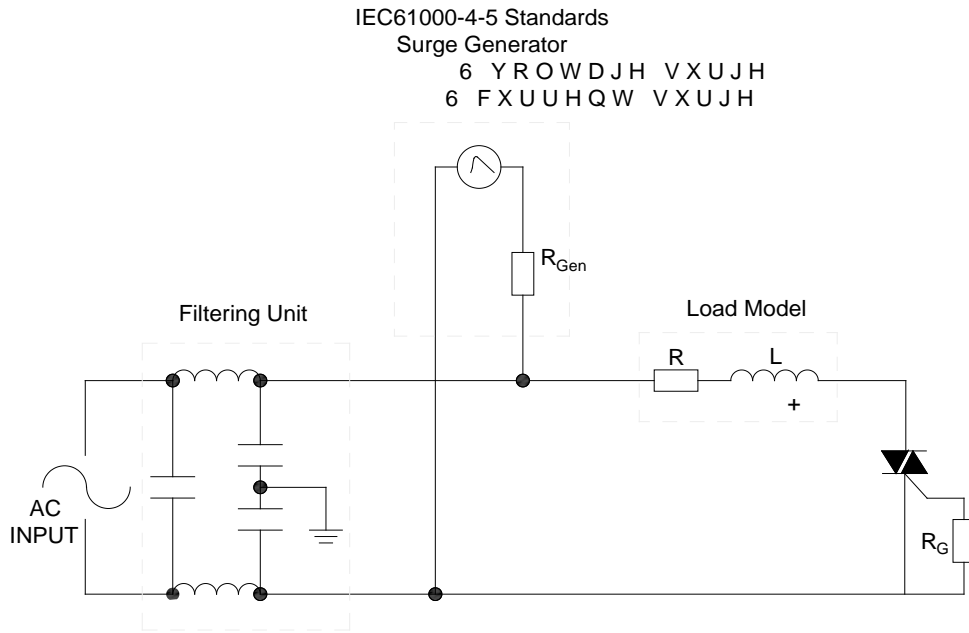
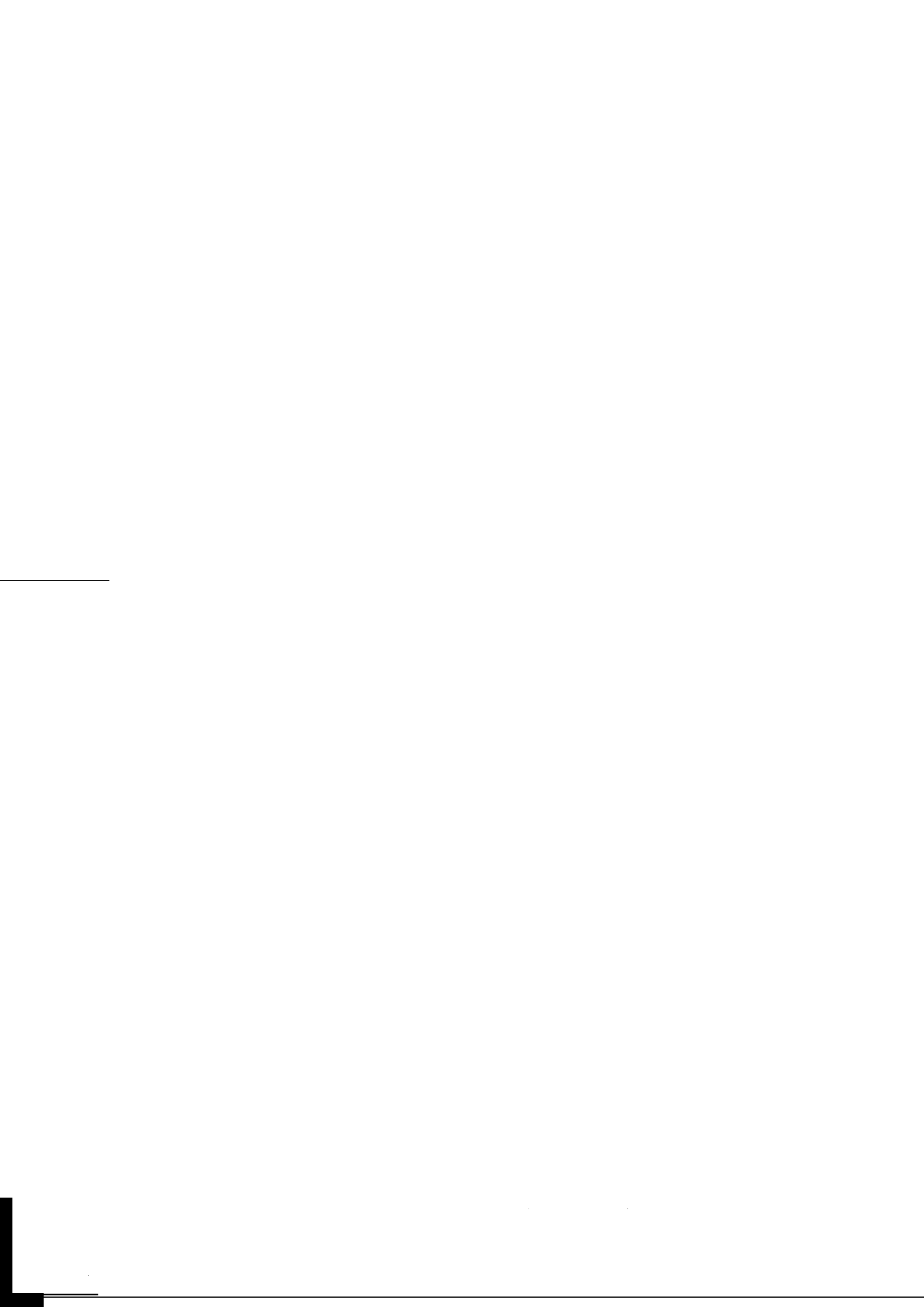






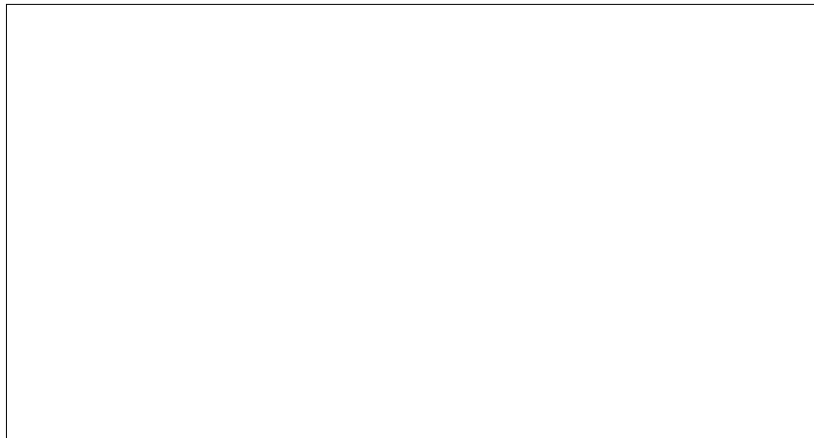
FIG.8 ÖTest circuit for inductive and resistive loads to IEC-61000-4-5 standards





## 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 |
| B2   | 5.18        |      | 5.48 | 0.202  |      | 0.216 |
| C    | 0.40        |      | 0.60 | 0.016  |      | 0.024 |
| C2   | 0.44        |      | 0.58 | 0.017  |      | 0.023 |
| D    | 5.90        |      | 6.30 | 0.232  |      | 0.248 |
| D1   |             |      |      |        |      |       |
| E    | 6.40        |      | 6.80 | 0.252  |      | 0.268 |
| E1   | 4.63        |      |      | 0.182  |      |       |
| G    | 4.47        |      | 4.67 | 0.176  |      | 0.184 |
| G1   | 2.18        |      | 2.38 | 0.086  |      | 0.094 |
|      |             |      |      |        |      |       |
| L    | 1.09        |      | 1.21 | 0.043  |      | 0.048 |
| L2   | 1.35        |      | 1.65 | 0.053  |      | 0.065 |
|      |             |      |      |        |      |       |



DELIVERY MODE

