

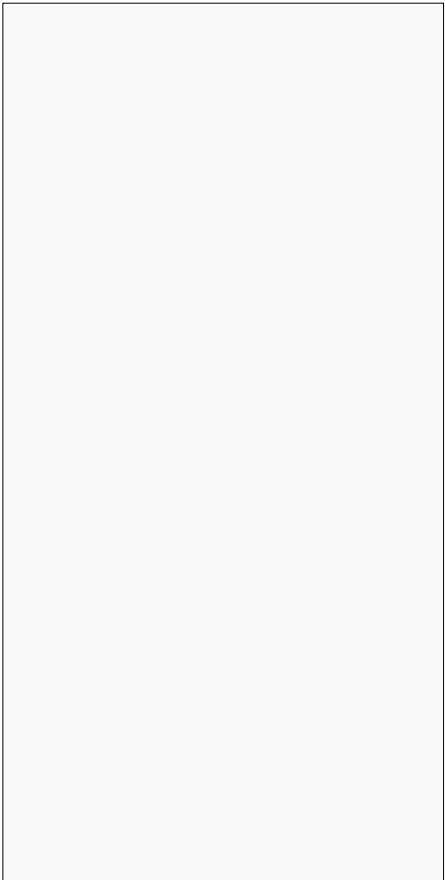


## ACJT04F-1000SW 4A TRIAC

Rev.A.1.1

### DESCRIPTION:

The ACJT04F-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 ACJT04F-1000SW embeds a TVS structure to absorb the inductive turn-off energy such as those described in the IEC 61000-4-5 standards. By using an external plastic package, ACJT04F-1000SW provides a rated insulation voltage of 2000 VRMS, complying with UL standards (File ref: E252906). Package TO-220F is RoHS compliant.



### MAIN FEATURES

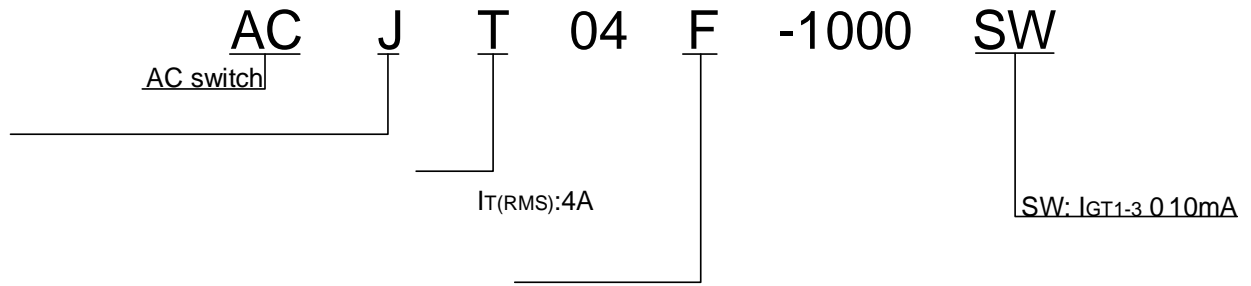
### ABSOLUTE MAXIMUM RATINGS

| 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 ( $T_c 0104^\circ\text{C}$ )  | $I_{T(RMS)}$ | 4       | A                      |
| Non repetitive surge peak on-state current (full cycle, $t_p=20\text{ms}$ , $T_j=25^\circ\text{C}$ )             | $I_{TSM}$    | 40      | A                      |
| Non repetitive surge peak on-state current (full cycle, $t_p=16.6\text{ms}$ , $T_j=25^\circ\text{C}$ )           |              | 44      |                        |
| $I^2t$ value for fusing ( $t_p=10\text{ms}$ , $T_j=25^\circ\text{C}$ )   | $I^2t$       | 8       | $\text{A}^2\text{s}$   |
| Critical rate of rise of on-state current ( $I_G=2\text{hI}_{GT}$ , $f=100\text{Hz}$ , $T_j=125^\circ\text{C}$ ) | $di/dt$      | 50      | $\text{A}/\mu\text{s}$ |
| Peak gate current ( $t_p=20\mu\text{s}$ , $T_j=125^\circ\text{C}$ )  | $I_{GM}$     | 4       | A                      |

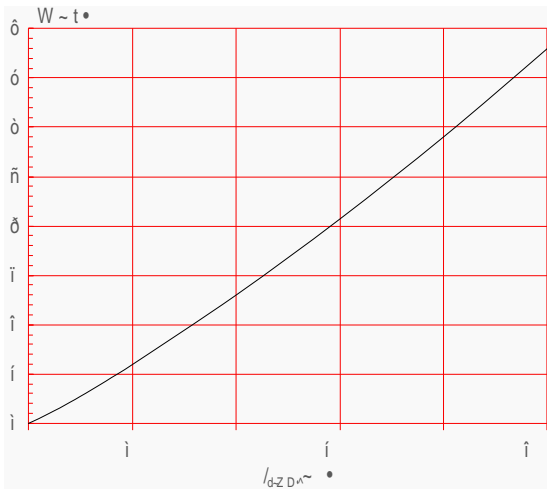
# ACJT04F-1000SW

|  |             |      |    |
|--|-------------|------|----|
| Average gate power dissipation ( $T_j=125$ )                       | $P_{G(AV)}$ | 0.5  | W  |
| Peak gate power  | $P_{GM}$    | 10   | W  |
| Peak pulse voltage<br>( $T_j=25$ ; non-repetitive,off-state;FIG.7) | $V_{pp}$    | 3.25 | kV |

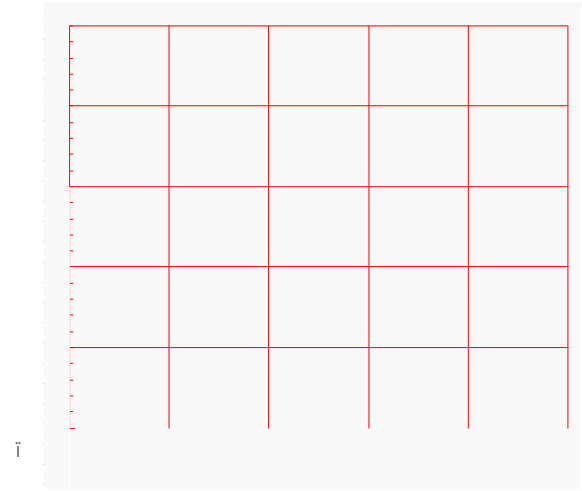
ORDERING INFORMATION



**FIG.1:** Maximum power dissipation versus RMS on-state current



**FIG.2:** RMS on-state current versus case temperature





## ORDERING INFORMATION

| Order code     | Voltage<br>$V_{DRM}/V_{RRM}$ (V) | IGT(mA) | Package      | Base qty.<br>(pcs) | Delivery<br>mode |
|----------------|----------------------------------|---------|--------------|--------------------|------------------|
| ACJT04F-1000SW | 1000                             | 10      | TO-220F(Ins) | 50                 | Tube             |


## Document Revision History

| Date         | Revision | Changes                        |
|--------------|----------|--------------------------------|
| Apr.14, 2023 | A.1.0    | Last updated                   |
| Oct.14, 2025 | A.1.1    | Revise PACKAGE MECHANICAL DATA |



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