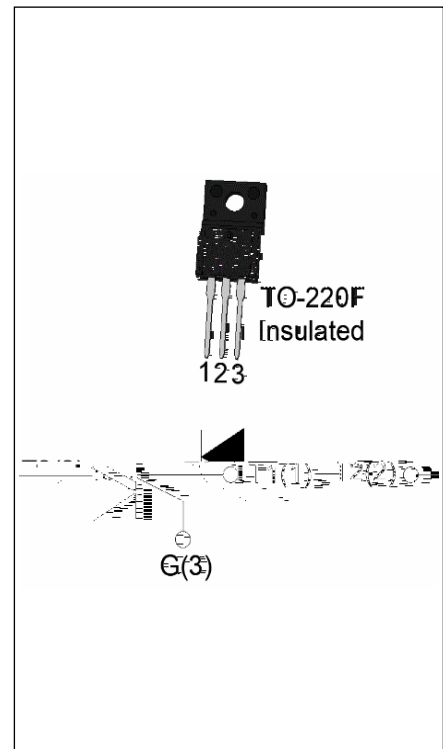


## DESCRIPTION:

The JST136F-600D 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. By using an external plastic package, JST136F-600D provides a rated insulation voltage of 2000 VRMS, complying with UL standards (File ref: E252906). Package TO-220F is RoHS compliant.

## MAIN FEATURES

| Symbol            | Value   | Unit |
|-------------------|---------|------|
| $I_{T(RMS)}$      | 4       | A    |
| $V_{DRM}/V_{RRM}$ | 600     | V    |
| $I_{GT} / / /$    | 5/5/5/5 | mA   |



## ABSOLUTE MAXIMUM RATINGS

|                                                                                                                   |   |                     |         |                  |
|-------------------------------------------------------------------------------------------------------------------|---|---------------------|---------|------------------|
|                                                                                                                   |   |                     |         |                  |
| Storage junction temperature range                                                                                |   | T <sub>stg</sub>    | -40-150 |                  |
| Operating junction temperature range                                                                              |   | T <sub>j</sub>      | -40-125 |                  |
| Repetitive peak off-state voltage (T <sub>j</sub> =25℃)                                                           |   | V <sub>DRM</sub>    | 600     | V                |
| Repetitive peak reverse voltage (T <sub>j</sub> =25℃)                                                             |   | V <sub>RRM</sub>    | 600     | V                |
| RMS on-state current (T <sub>c</sub> 86℃)                                                                         |   | I <sub>T(RMS)</sub> | 4       | A                |
| Non repetitive surge peak on-state current<br>(full cycle , t <sub>p</sub> =20ms , T <sub>j</sub> =25℃)           |   | I <sub>TSM</sub>    | 35      | A                |
| Non repetitive surge peak on-state current<br>(full cycle , t <sub>p</sub> =16.6ms , T <sub>j</sub> =25℃)         |   |                     | 38.5    |                  |
| I <sup>2</sup> t value for fusing (t <sub>p</sub> =10ms , T <sub>j</sub> =25℃)                                    |   | I <sup>2</sup> t    | 6.1     | A <sup>2</sup> s |
| Critical rate of rise of on-state current<br>(I <sub>G</sub> =2 I <sub>GT</sub> , f=100Hz , T <sub>j</sub> =125℃) | - | di/dt               | 50      | A/μs             |
|                                                                                                                   | - |                     | 30      |                  |
| Peak gate current (t <sub>p</sub> =20μs , T <sub>j</sub> =125℃)                                                   |   | I <sub>GM</sub>     | 2       | A                |
| Average gate power dissipation (T <sub>j</sub> =125℃)                                                             |   | P <sub>G(AV)</sub>  | 0.5     | W                |





## ORDERING INFORMATION

J ST 136 F -600 T

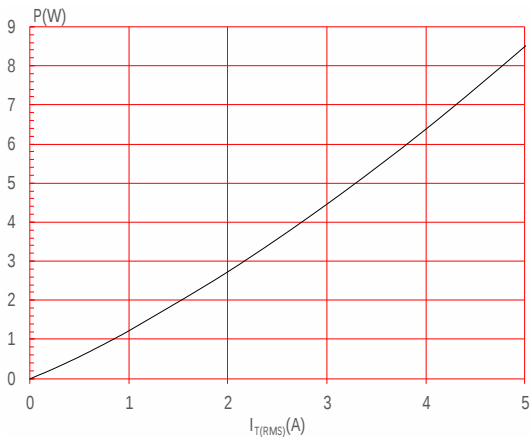
JieJie Microelectronics Co., Ltd.

Triacs

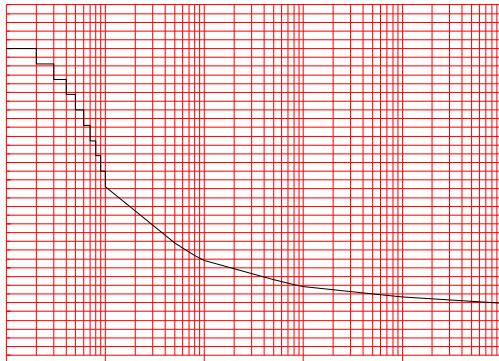
600:V



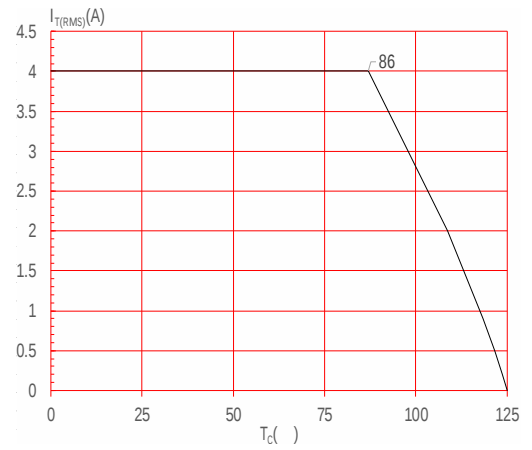
Maximum power dissipation versus RMS on-state current



Surge peak on-state current versus number of cycles



RMS on-state current versus case temperature



On-state characteristics



FIG.7 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards





## ORDERING INFORMATION

|  |  |  |  |  |  |
|--|--|--|--|--|--|
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

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



