## JST137E-800G 8A TRIAC

Rev.A.1.1

The JST137E-800G 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. Package TO-263 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 ) | $V_{DRM}$ | 800 | V |
| Repetitive peak reverse voltage ($T_j$=25 ) | $V_{RRM}$ | 800 | V |
| RMS on-state current ($T_C$ 100 ) | $I_{T(RMS)}$ | 8 | A |
| Non repetitive surge peak on-state current (full cycle , $t_p$=20ms , $T_j$=25 ) | $I_{TSM}$ | 65 | A |
| Non repetitive surge peak on-state current (full cycle , $t_p$=16.6ms , $T_j$=25 ) | | 72 | |
| $I^2t$ value for fusing ($t_p$=10ms , $T_j$=25 ) | $I^2t$ | 21 | $A^2s$ |
| Critical rate of rise of on-state current ($I_G$=2 × $I_{GT}$ , f=100Hz , $T_j$=125 ) | dI/dt | - - | |

($T_j$=25

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

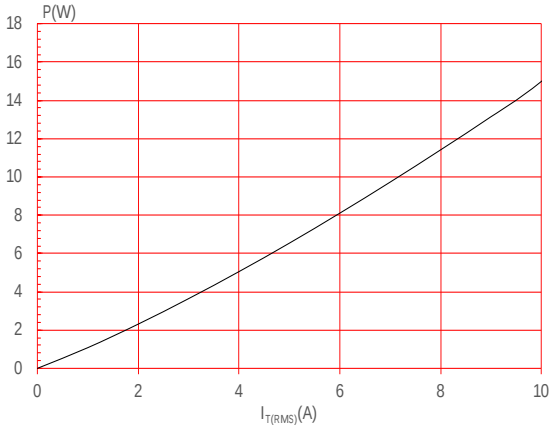



**FIG.2:** RMS on-state current versus case temperature

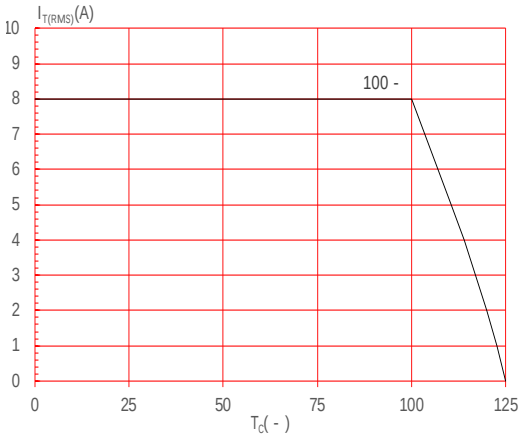
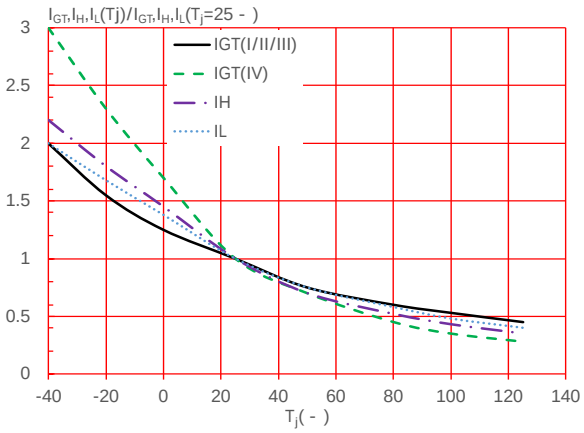



**FIG.3:** RMS on-state current versus ambient temperature (printed circuit board FR4, copper thickness: 35µm) (full cycle)

**FIG.4:** Surge peak on-state current versus number of cycles

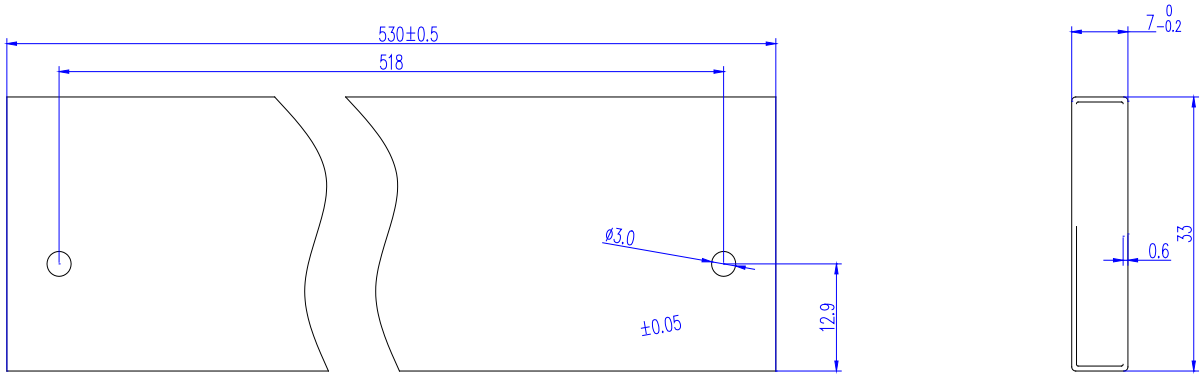
**FIG.7:** Relative variations of gate trigger current, holding current and latching current versus junction temperature



| Order code | Voltage $V_{DRM}/V_{RRM}$ (V) | IGT(mA) | | Package | Base qty. (pcs) | Delivery mode |
|---|---|---|---|---|---|---|
| | | H- I- J | K | | | |
| **JST137E-800G** | **800** | **50** | **100** | **TO-263** | **50** | **Tube** |
| **JST137E-800G-TR** | | | | | **800** | **Tape & Reel** |

## Document Revision History

| Date | Revision | Changes |
|---|---|---|
| Apr.14, 2023 | A.1.0 | Last updated |
| Oct.21, 2025 | A.1.1 | Revise PACKAGE MECHANICAL DATA |


530±0.5
518
Ø3.0
±0.05
12.9
7 0 -0.2
0.6
33

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