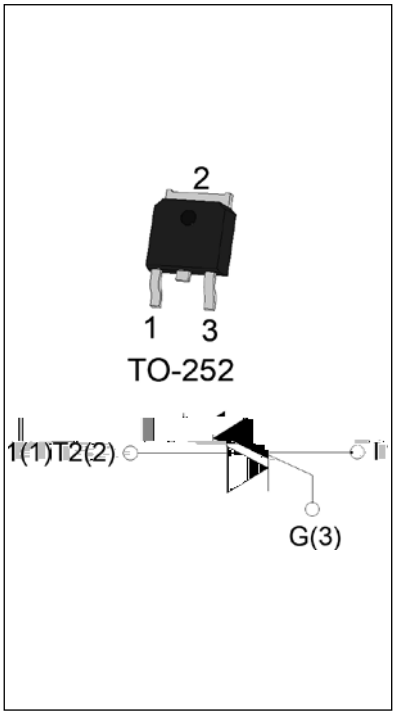
## JST08K-800CW 8A TRIAC

Rev.A.1.1

The JST08K-800CW 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. JST08K-800CW snubberless triac is especially recommended for use on inductive loads. Package TO-252 is RoHS compliant.




| Symbol | Value | Unit |
|---|---|---|
| $I_{T(RMS)}$ | 8 | A |
| $V_{DRM}$ /$V_{RRM}$ | 800 | V |
| $I_{GT}$ / / | 35/35/35 | mA |

| 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 ($T_C \leq$ 91 ) | $I_{T(RMS)}$ | 8 | A |
| Non repetitive surge peak on-state current (full cycle , $t_p$=20ms , $T_j$=25 ) | $I_{TSM}$ | 80 | A |
| Non repetitive surge peak on-state current (full cycle , $t_p$=16.6ms , $T_j$=25 ) | | 88 | |
| $I^2t$ value for fusing ($t_p$=10ms , $T_j$=25 ) | $I^2t$ | 32 | $A^2s$ |
| Critical rate of rise of on-state current ($I_G$=2 $I_{GT}$ , f=100Hz , $T_j$=125 ) | dI/dt | 100 | A/εs |
| Peak gate current ($t_p$=20εs , $T_j$=125 ) | $I_{GM}$ | 4 | A |
| Average gate power dissipation ($T_j$=125 ) | $P_{G(AV)}$ | 0.5 | W |
| Peak gate power | $P_{GM}$ | 10 | W |

J ST 08 K -800 CW -/

JieJie Miee .9.6 Tm (1 Tf -0.018Tc -0., (e)56 LR)- -/

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

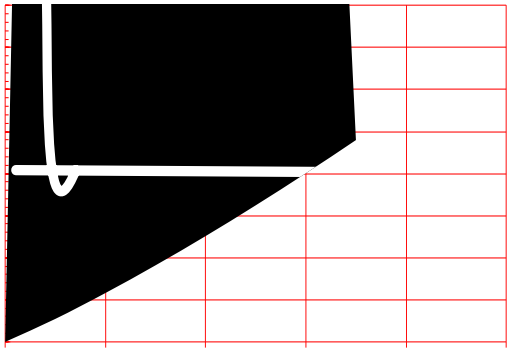
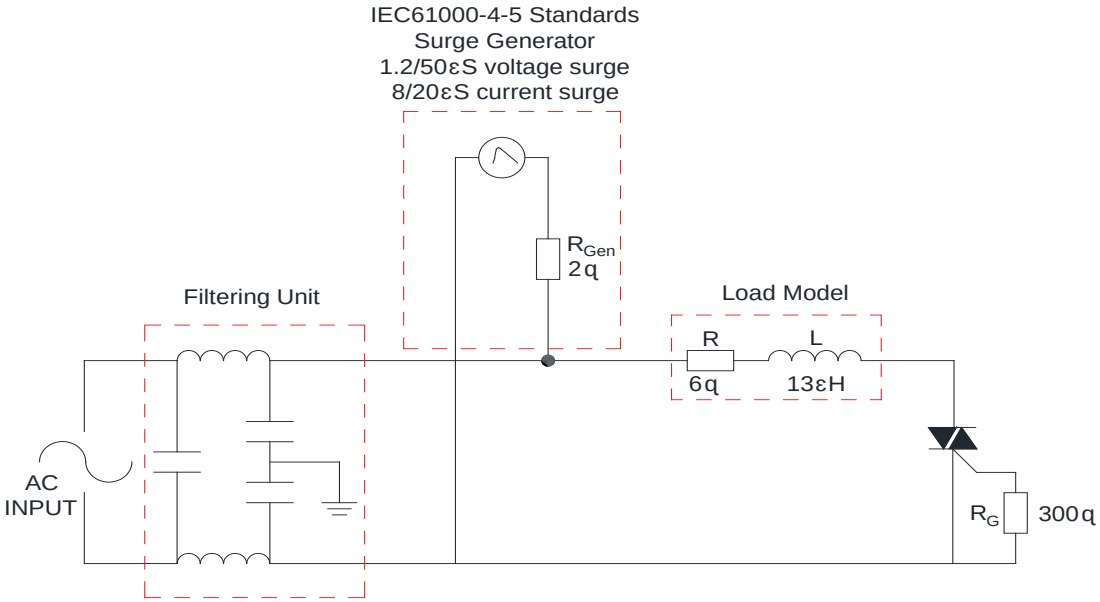


**FIG.2:** RMS on-state current versus case temperature

**JST08K-800CW** **JieJie M**

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

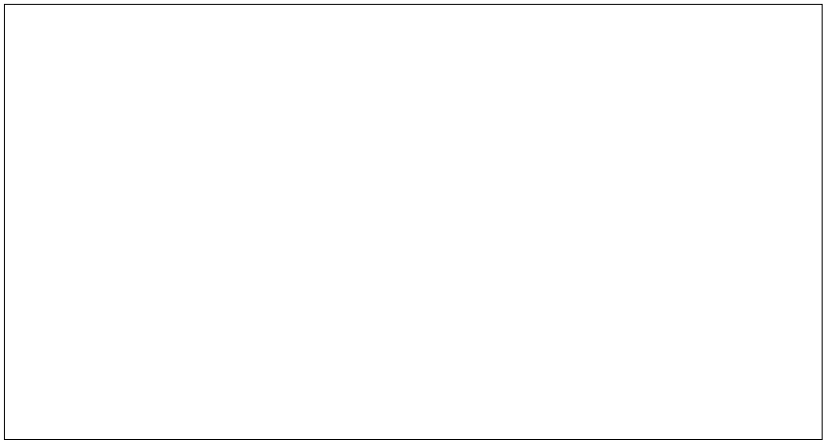


| Order code | Voltage $V_{DRM}/V_{RRM}$ (V) | IGT(mA) | Package | Base qty. (pcs) | Delivery mode |
|---|---|---|---|---|---|
| | | H- I- J | | | |
| JST08K-800CW | 800 | 35 | TO-252 | 80 | Tube |
| JST08K-800CW-TR | | | | 2,500 | Tape & Reel |

## Document Revision History

| Date | Revision | Changes |
|---|---|---|
| Apr.12, 2023 | A.1.0 | Last update |
| Oct.22, 2025 | A.1.1 | Revise PACKAGE MECHANICAL DATA |

| Ref. | Dimensions | | | | | |
|---|---|---|---|---|---|---|
| | Millimeters | | | Inches | | |
| | Min. | Typ. | Max. | Min. | Typ. | Max. |
| A | | | | | | |
| A2 | | | | | | |
| B | | | | | | |
| C | | | | | | |
| D | | | | | | |
| E | | | | | | |
| G | | | | | | |
| G1 | | | | | | |
| L | | | | | | |



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