## JST08C-1200SW 8A TRIAC

Rev.A.1.1

## DESCRIPTION:

The JST08C-1200SW 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. JST08C-1200SW snubberless triac is especially recommended for use on inductive loads. It can be driven directly through the MCU I/O port. From T2 terminals to external heatsink.
Package TO-220C 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 ) | $V_{DRM}$ | 1200 | V |
| Repetitive peak reverse voltage ($T_j$=25 ) | $V_{RRM}$ | 1200 | V |
| RMS on-state current ($T_C \leq$ 108 ) | $I_{T(RMS)}$ | 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 | | | |

| | | | |
|---|---|---|---|
| Peak gate power | $P_{GM}$ | 10 | W |
| Peak pulse voltage ($T_j$=25 ; non-repetitive,off-state;FIG.7) | $V_{pp}$ | 1.5 | kV |

**ELECTRICAL CHARACTERISTICS** ($T_j$=25 unless otherwise specified)

| Symbol | Test Condition | Quadrant | Value | | Unit |
|---|---|---|---|---|---|
| $I_{GT}$ | $V_D$ =12V $R_L$ =33 | - - | MAX. | 10 | mA |
| $V_{GT}$ | | - - | MAX. | 1 | V |
| $V_{GD}$ | $V_D$ =$V_{DRM}$ $T_j$ =125 | | | | |

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



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

**JST08C-1200SW**