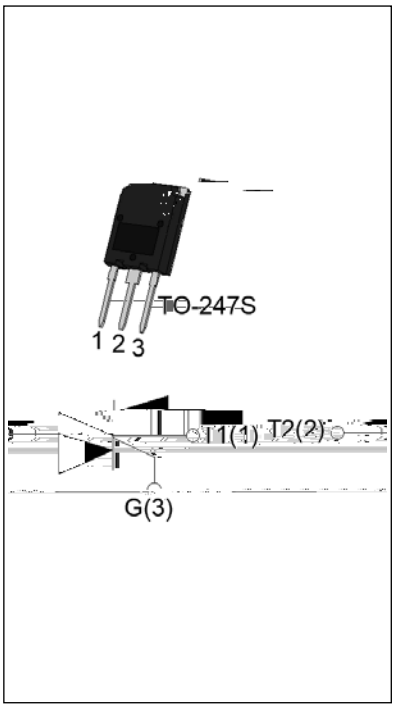
## JST60CS-1600BW 60A TRIAC

Rev.A.1.1

## DESCRIPTION:

The JST60CS-1600BW 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. JST60CS-1600BW snubberless triac is especially recommended for use on inductive loads. Package TO-247S is RoHS compliant.




## MAIN FEATURES

| Symbol | Value | Unit |
|---|---|---|
| $I_{T(RMS)}$ | 60 | A |
| $V_{DRM}$ /$V_{RRM}$ | 1600 | V |
| $I_{GT}$ / / | 50/50/50 | mA |

## 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 ) | $V_{DRM}$ | 1600 | V |
| Repetitive peak reverse voltage ($T_j$=25 ) | $V_{RRM}$ | 1600 | V |
| RMS on-state current ($T_C \leq$ 92 ) | $I_{T(RMS)}$ | 60 | A |
| Non repetitive surge peak on-state current (full cycle , $t_p$=20ms , $T_j$=25 ) | $I_{TSM}$ | 600 | A |
| Non repetitive surge peak on-state current (full cycle , $t_p$=16.6ms , $T_j$=25 ) | | 660 | |
| $I^2t$ value for fusing ($t_p$=10ms , $T_j$=25 ) | $I^2t$ | 1800 | $A^2s$ |
| Critical rate of rise of on-state current ($I_G$=2 $I_{GT}$ , f=100Hz , $T_j$=125 ) | dI/dt | 100 | A/μs |
| Peak gate current ($t_p$=20μs , $T_j$=125 ) | $I_{GM}$ | 8 | A |
| Average gate power dissipation ($T_j$=125 ) | $P_{G(AV)}$ | 0.5 | W |
| Peak gate power | $P_{GM}$ | 10 | W |

| | | | |
|---|---|---|---|
| Peak pulse voltage ($T_j$=25 ; non-repetitive,off-state;FIG.7) | $V_{pp}$ | 1.1 | kV |

**ELECTRICAL CHARACTERISTICS**($T_j$=25 unless otherwise sQ0.481 3T (i)6f.5(T16(s)T16e)6 4(dJ 0

## ORDERING INFORMATION

## MARKING

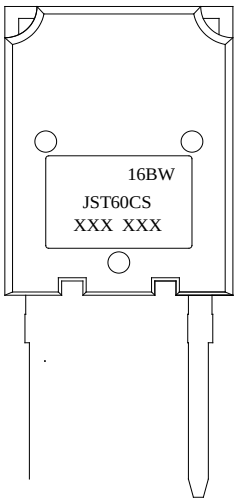


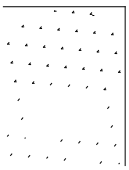
**FIG.1:** Maximum power dissipation versus RMS on-state current

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

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## PACKAGE MECHANICAL DATA



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