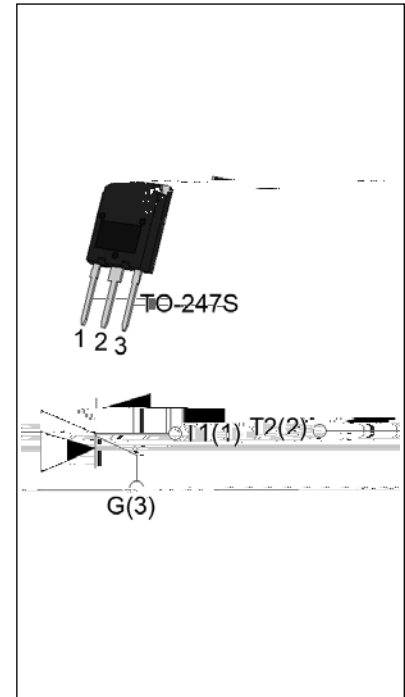


JST60CS-1600BW 60A TRIAC

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 |

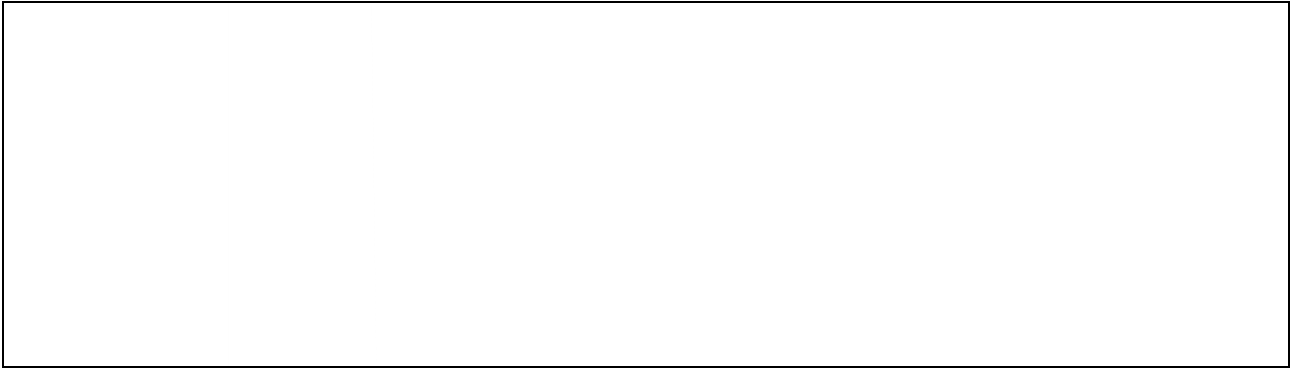
ABSOLUTE MAXIMUM RATINGS

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

ORDERING INFORMATION



MARKING

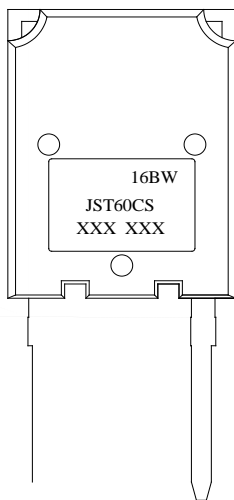


FIG.1: Maximum power dissipation versus RMS on-state current

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

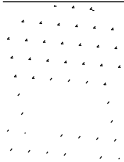
JST60CS-1600BW

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PACKAGE MECHANICAL DATA



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