



JST04H-600BW 4A TRIAC

Rev.A.1.1

DESCRIPTION:

The JST04H-600BW 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. JST04H-600BW snubberless triac is especially recommended for use on inductive loads. From T2 terminals to external heatsink. Package TO-251 is RoHS compliant.

MAIN FEATURES

ABSOLUTE MAXIMUM RATINGS

P 0Let-3(er13.085 0 Td ()4.8C /P <</MCID 6 >>BDC 0.004 15Tc -0.002 Tw (

| | | | |
|--|----------|---|----|
| Peak pulse voltage ($T_j=25$; non-repetitive, off-state; FIG.7) | V_{pp} | 4 | kV |
|--|----------|---|----|

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

| Symbol | Test Condition | Quadrant | Value | | Unit |
|----------------------|--|----------|-------|------|------------|
| I_{GT} | $V_D=12V$ $R_L=33$ | - - | MAX. | 50 | mA |
| V_{GT} | | - - | MAX. | 1 | V |
| V_{GD} | $V_D=V_{DRM}$ $T_j=125$ $R_L=3.3k$ | - - | MIN. | 0.2 | V |
| I_L | $I_G=1.2I_{GT}$ | - | MAX. | 70 | mA |
| | | | | 80 | |
| I_H | $I_T=100mA$ | | MAX. | 60 | mA |
| dV/dt | $V_D=400V$ Gate Open $T_j=125$ | | MIN. | 2000 | V/ μs |
| (dI/dt) _c | (dV/dt) _c =20V/ μs , $T_j=125$ | | MIN. | 10 | A/ms |
| t_{on} | $I_G=80mA$ $I_A=400mA$ $I_R=40mA$ $T_j=25$ | | TYP. | 5 | μs |
| t_{off} | | | | 50 | |

STATIC CHARACTERISTICS

| Symbol | Parameter | | Value(MAX.) | Unit |
|-----------|-----------------------------|-----------|-------------|---------|
| V_{TM} | $I_{TM}=5A$ $t_p=380\mu s$ | $T_j=25$ | 1.65 | V |
| V_{TO} | Threshold voltage | $T_j=125$ | 0.799 | V |
| R_D | Dynamic resistance | $T_j=125$ | 151 | m |
| I_{DRM} | $V_D=V_{DRM}$ $V_R=V_{RRM}$ | $T_j=25$ | 5 | μA |
| I_{RRM} | | $T_j=125$ | 0.2 | mA |

THERMAL RESISTANCES

| Symbol | Parameter | Value | Unit |
|---------------|--------------------------|-------|-------------|
| $R_{th(j-c)}$ | junction to case (AC) | 4.5 | /W |
| $R_{th(j-a)}$ | junction to ambient (AC) | 120 | /W |

ORDERING INFORMATION

J ST 04 H -600 BW
JieJie Microelectronics Co., Ltd.

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

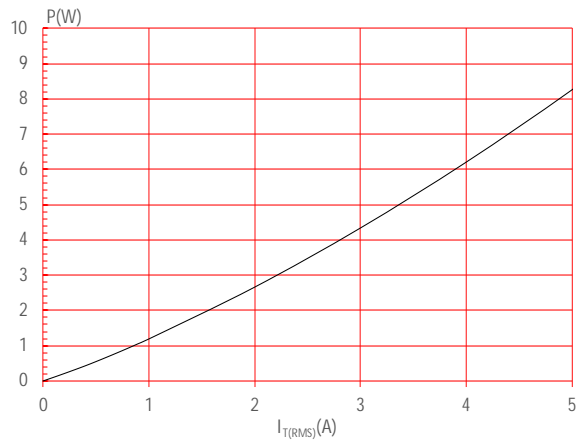
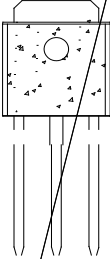


FIG.2: RMS on-state current versus case temperature



JST04H-600BW

PACKAGE MECHANICAL DATA



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