## JST138C-600D 12A TRIAC

Rev.A.1.1

DESCRIPTION:

MAIN FEATURES

ABSOLUTE MAXIMUM RATINGS

| Parameter | | Symbol | Value | Unit |
|---|---|---|---|---|
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## ELECTRICAL CHARACTERISTICS (Tj=25℃ Unless otherwise noted)

| Symbol | Test Condition | Quadrant | Value | | Unit |
|---|---|---|---|---|---|
| $I_{GT}$ | $V_D$=12V $R_L$=33Ω | I - II - III - | MIN. | 5 | mA |
| | | IV | | 10 | |
| $V_{GT}$ | | ALL | MAX. | 1.3 | V |
| $V_{GD}$ | $V_D$=$V_{DRM}$ Tj=125℃ $R_L$=3.3kΩ | ALL | MIN. | 0.2 | V |
| $I_L$ | $I_G$=1.2 $I_{GT}$ | I - II - III - | MAX. | 15 | mA |
| | | IV | | 20 | |
| $I_H$ | $I_T$=500mA | | MAX. | 10 | mA |
| dV/dt | $V_D$=67%$V_{DRM}$ Gate Open Tj=125℃ | | MIN. | 600 | V/μs |
| (dI/dt)c | Without Snubber Tj=125℃ | | MIN. | 2.7 | A/ms |
| $t_{gt}$ | $I_G$=200mA $I_A$=200mA $I_R$=200mA Tj=25℃ | | TYP. | 3 | μs |
| $t_{rr}$ | | | | 80 | |

## STATIC CHARACTERISTICS

| Symbol | Parameter | | Value(MAX.) | Unit |
|---|---|---|---|---|
| $V_{TM}$ | $I_{TM}$=8.5A Pulse Width=300μs | Tj=25℃ | 1.6 | V |
| $V_{TO}$ | Threshold Voltage | Tj=125℃ | 0.8 | V |
| $R_D$ | Dynamic Resistance | Tj=125℃ | 41 | mΩ |
| $I_{DRM}$ | $V_D$=$V_{DRM}$ $V_R$=$V_{RRM}$ | Tj=25℃ | 5 | μA |
| $I_{RRM}$ | | Tj=125℃ | 0.4 | mA |

# JST138C-600D

FIG.1:

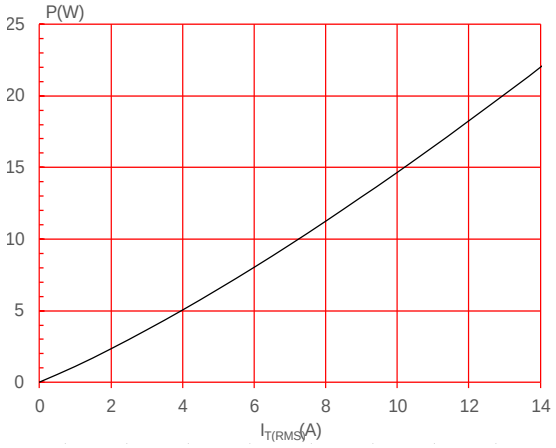
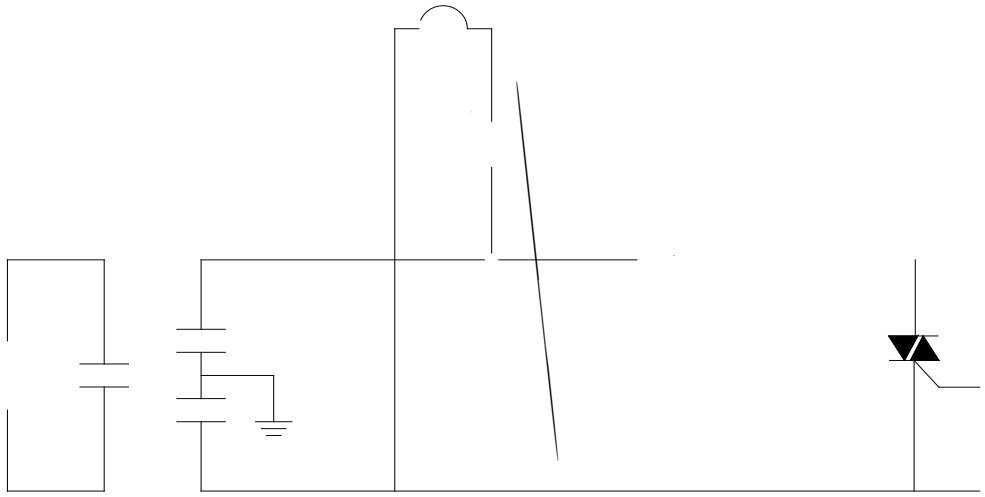



FIG.2:



## ORDERING INFORMATION

| Order code | Voltage $V_{DRM}/V_{RRM}$ (V) | IGT(mA) | | Package | Base qty. (pcs) | Delivery mode |
|---|---|---|---|---|---|---|
| | | - - | | | | |
| JST138C-600D | 600 | 5 | 10 | TO-220C | 50 | Tube |

PACKAGE MECHANICAL DATA

