



## JST06H-600TW 6A TRIAC

Rev.A.1.1

### DESCRIPTION:

The JST06H-600TW 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. JST06H-600TW 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-251 is RoHS compliant.

### MAIN FEATURES

### ABSOLUTE MAXIMUM RATINGS

Paramete<

A0.002 Tw Uni.28 (pl)6(i)6(ant)]TJ.9Tc 0 Tw 19.

Peak gate power	$P_{GM}$	10	W
Peak pulse voltage ( $T_j=25$ ; non-repetitive,off-state;FIG.7)	$V_{pp}$	3.5	kV

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

Symbol	Test Condition	Quadrant	Value		Unit
$I_{GT}$	$V_D=12V R_L=33$	- -	MAX.	5	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.	10	mA
				15	
$I_H$	$I_T=100mA$		MAX.	10	mA
dV/dt	$V_D=400V$ Gate Open $T_j=125$		MIN.	150	V/ $\mu s$
(dI/dt)c	(dV/dt)c=10V/ $\mu s$ , $T_j=125$		MIN.	0.5	A/ms
$t_{on}$	$I_G=10mA I_A=200mA I_R=20mA$ $T_j=25$		TYP.	2	$\mu s$
$t_{off}$				20	

**STATIC CHARACTERISTICS**

Symbol	Parameter		Value(MAX.)	Unit
$V_{TM}$	$I_{TM}=8.5A t_p=380\mu s$	$T_j=25$	1.5	V
$V_{TO}$	Threshold voltage	$T_j=125$	0.82	V
$R_D$	Dynamic resistance	$T_j=125$	57	m
$I_{DRM}$	$V_D=V_{DRM} V_R=V_{RRM}$	$T_j=25$	5	$\mu A$
$I_{RRM}$		$T_j=125$	0.2	mA

**THERMAL RESISTANCES**

Symbol	Parameter	Value	Unit
$R_{th(j-c)}$	junction to case (AC)	4	$\text{/W}$
$R_{th(j-a)}$	junction to ambient (AC)	120	$\text{/W}$

ORDERING INFORMATION

J ST 06 H -600

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

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

FIG.7 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards



**ORDERING INFORMATION**

Order code	Voltage $V_{DRM}/V_{RRM}$ (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
		- -			
<b>JST06H-600TW</b>	<b>600</b>	<b>5</b>	<b>TO-251</b>	<b>80</b>	<b>Tube</b>

**Document Revision History**

Date	Revision	Changes
Apr.11, 2023	A.1.0	Last updated
Oct.16, 2025	A.1.1	Revise PACKAGE MECHANICAL DATA

**PACKAGE MECHANICAL DATA**

\_\_\_\_\_

|

Information furnished in this document is believed to be accurate and reliable. However, Jiangsu JieJie Microelectronics Co., Ltd. assumes no responsibility for the consequences of use without consideration for such information nor use beyond it. Information mentioned in this document is subject to change without notice, apart from that when an agreement is Jiangsu Jie