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 (6

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 =33Ω	- -	MAX.	50	mA
V_{GT}		- -	MAX.	1	V
V_{GD}	V_D =V_{DRM} T_j =125 R_L =3.3kΩ	- -	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=380μs	T_j=25	1.65	V
V_{TO}	Threshold voltage	T_j=125	0.799	V
R_D	Dynamic resistance	T_j=125	151	mΩ
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

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

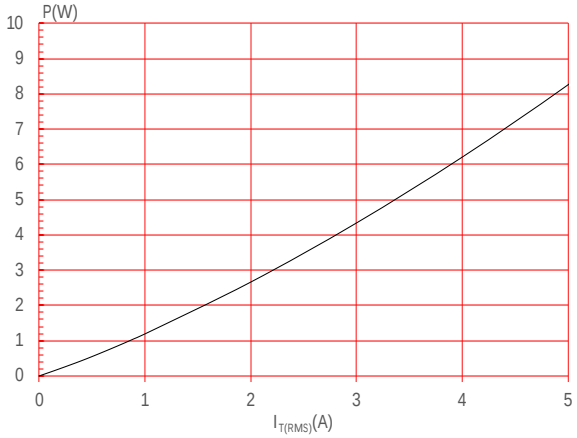

FIG.2: RMS on-state current versus case temperature

JST04H-600BW

PACKAGE MECHANICAL DATA