JST12E-600B 12A TRIAC

Rev.A.1.1

DESCRIPTION:

The JST12E-600B 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.Package TO-263 is RoHS compliant.

MAIN FEATURES

ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Value	Unit
Storage junction temperature range	T_{stg}	-	

ECTRICAL CHARACTERISTICS (T_j=25 unless otherwise specified)

mbol	Test Condition	Quadrant	Value		Unit
I_{GT}	V_D=12V R_L=33	- -	MAX.	50	mA
				70	
V_{GT}		ALL	MAX.	1	V
V_{GD}	V_D=V_{DRM} T_j=125 R_L=3.3k	ALL	MIN.	0.2	V
I_L	I_G=1.2I_{GT}	- -	MAX.	50	mA
				100	
I_H	I_T=500mA		MAX.	60	mA
V/dt	V_D=400V Gate Open T_j=125		MIN.	1200	V s
V/dt)c	(dI/dt)c=5.3A/ms, T_j=125		MIN.	12	9 V
t_{on}	I_G=80mA I_A=400mA I_R=40mA T_j=25		TYP.	5	s
t_{off}				30	

ATIC CHARACTERISTICS

mbol	Parameter	Value(MAX.)	Unit
V_{TM}			

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

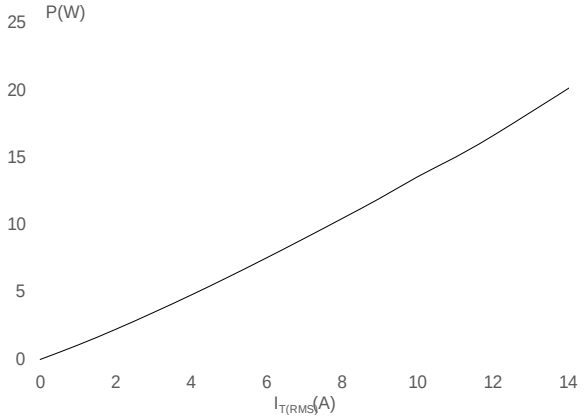
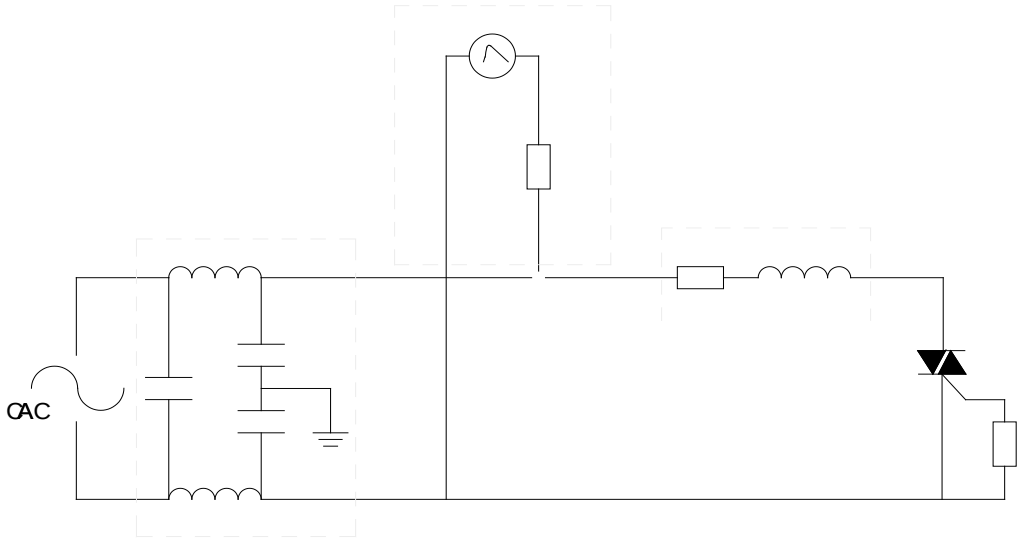


FIG.2: RMS on-state current versus case temperature

FIG.7: Relative variations of gate trigger current, holding current and latching current versus junction temperature

FIG.8: 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
		H- I- J	K			
JST12E-600B	600	50	70	TO-263	50	Tube
JST12E-600B-TR					800	Tape & Reel

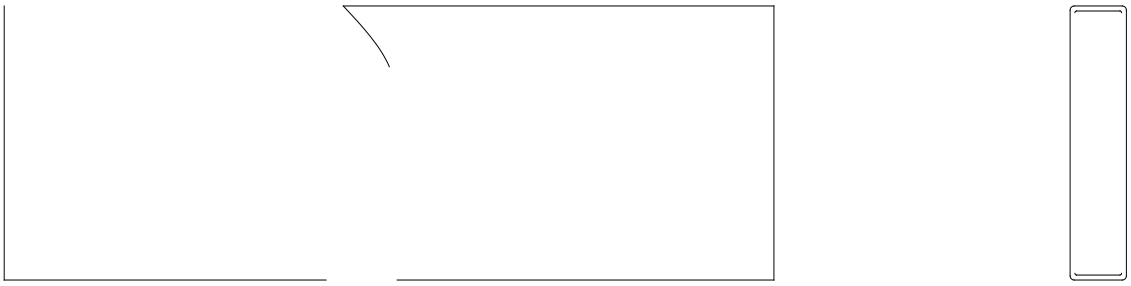
Document Revision History

Date	Revision	Changes
Apr.14, 2023	A.1.0	Last updated
Oct.20, 2025	A.1.1	Revise PACKAGE MECHANICAL DATA

PACKAGE MECHANICAL DATA

mensions			
	Inches		
.	Min.	Typ.	Max.
0	0.390		0.402
0	0.579		0.622
0	0.370		0.378
	0.094		
0	0.047		0.059
5	0.029		0.033

DELIVERY MODE



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