

JST138K-1600E 12A TRIAC

Rev.A.1.1

DESCRIPTION:

The JST138K-1600E 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-252 is RoHS compliant.

MAIN FEATURES

ABSOLUTE MAXIMUM RATINGS

Parameter		Symbol	Value	Unit
Storage junction temperature range		T _{stg}	-40-150	
Operating junction temperature range		T _j	-40-125	
Repetitive peak off-state voltage (T _j =25)		V _{DRM}	1600	V
Repetitive peak reverse voltage (T _j =25)		V _{RRM}	1600	V
RMS on-state current (T _c 064)		I _{T(RMS)}	12	A
Non repetitive surge peak on-state current (full cycle , t _p =20ms , T _j =25)		I _{TSM}	70	A
Non repetitive surge peak on-state current (full cycle , t _p =16.6ms , T _j =25)			77	
I ² t value for fusing (t _p =10ms , T _j =25)		I ² t	24.5	A ² s
Critical rate of rise of on-state current (I _G =2×I _{GT} , f=100Hz , T _j =125)	-	di/dt	50	A s
	-		30	
Peak gate current (t _p =20 s , T _j =125)		I _{GM}	4	A
Average gate power dissipation (T _j =125)		P		

JST138K-1600E

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

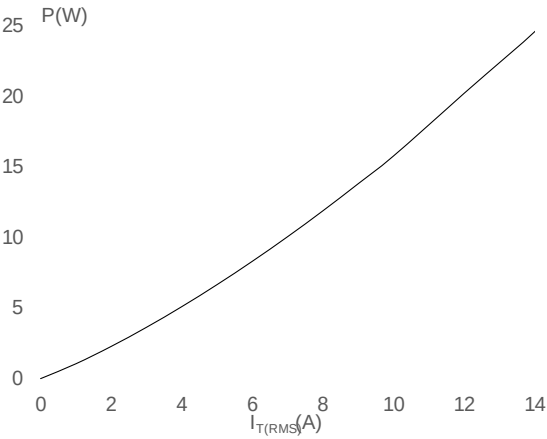
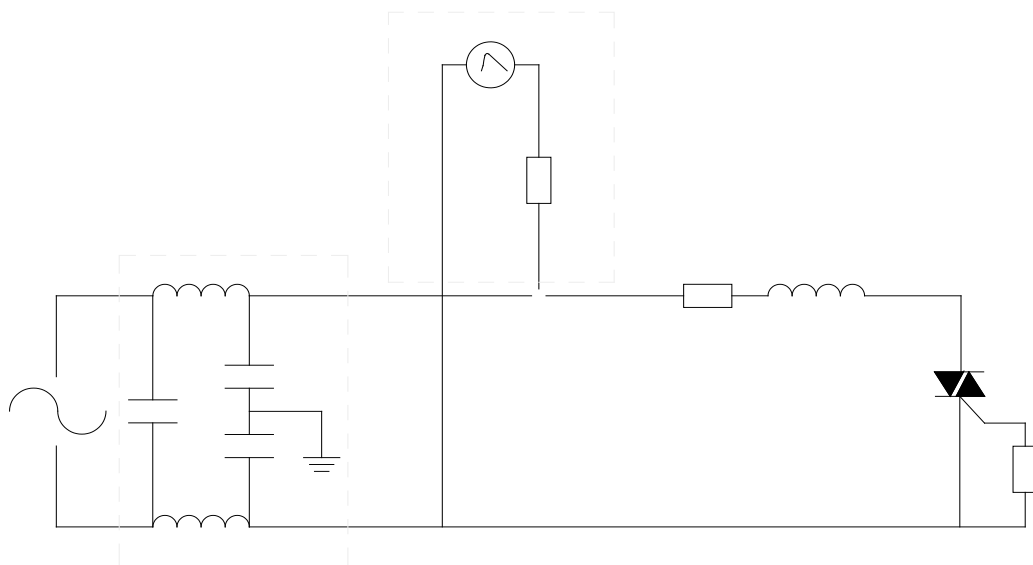


FIG.2: RMS on-state current versus case temperature

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	
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