JST137K-600DX 8A TRIAC

Rev.A.1.1

DESCRIPTION:

The JST137K-600DX 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}	600	V
Repetitive peak reverse voltage (T_j=25)		V_{RRM}	600	V
RMS on-state current (T_C 065)		$I_{T(RMS)}$	8	A
Non repetitive surge peak on-state current (full cycle , t_p=20ms , T_j=25)		I_{TSM}	55	A
Non repetitive surge peak on-state current (full cycle , t_p=16.6ms , T_j=25)			61	
I^2t value for fusing (t_p=10ms , T_j=25)		I^2t	15.125	A^2s
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}	2	A
Average gate power dissipation (T_j=125)		$P_{G(AV)}$	0.5	W
Peak gate power		P_{GM}	5	W
Peak pulse voltage (T_j=25 ; non-repetitive,off-state;FIG.8)		V_{pp}	3.5	kV kV]TJ EMQ d

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

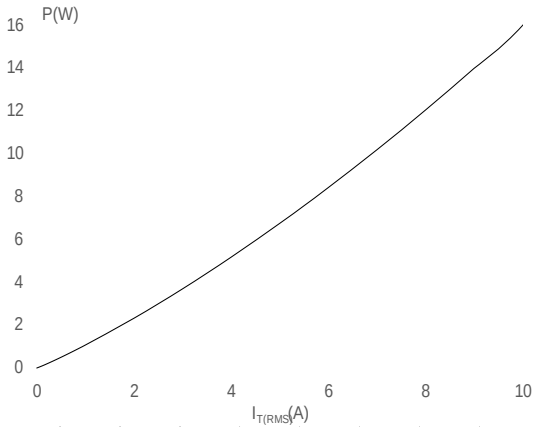


FIG.2: RMS on-state current versus case temperature

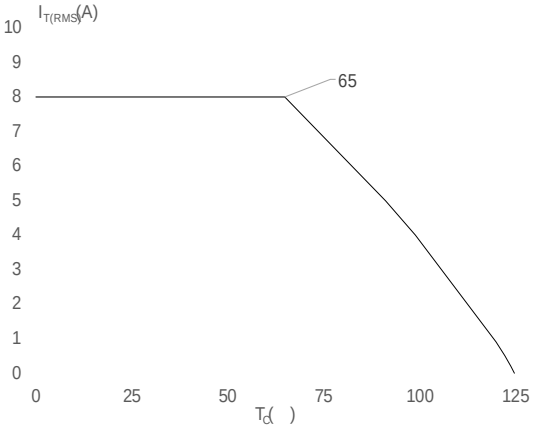


FIG.3: RMS on-state current versus ambient temperature (printed circuit board FR4, copper thickness: P (full cycle)

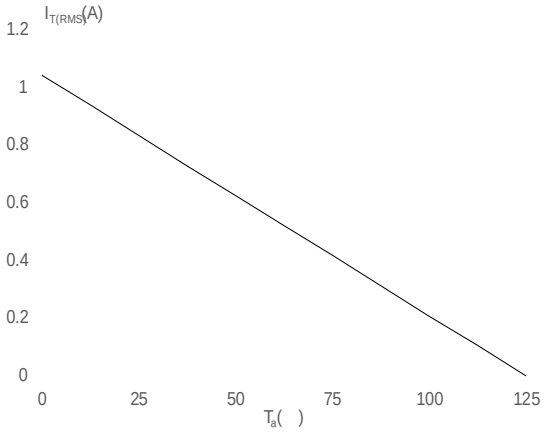
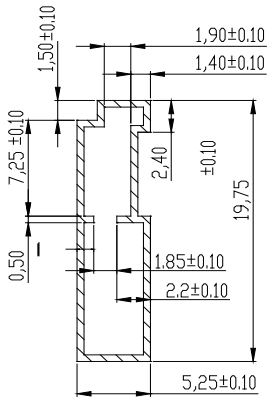


FIG.4: Surge peak on-state current versus number of cycles

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

FIG.8 ÖTest circuit for inductive and resistive loads to IEC-61000-4-5 standards

DELIVERY MODE



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