

## DESCRIPTION:

The JST138K-600E 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 ( $T_c 070$ )	$I_{T(RMS)}$	12	A
Non repetitive surge peak on-state current (full cycle , $t_p=20ms$ , $T_j=25$ )	$I_{TSM}$	95	A
Non repetitive surge peak on-state current (full cycle , $t_p=16.6ms$ , $T_j=25$ )		105	
$I^2t$ value for fusing ( $t_p=10ms$ , $T_j=25$ )	$I^2t$	45	$A^2s$
Critical rate of rise of on-state current ( $I_G=2 \times I_{GT}$ , $f=100Hz$ , $T_j=125$ )	-	80	A s
	-	50	
Peak gate current ( $t_p=20$ s , $T_j=125$ )	$I_{GM}$	4	A
Average gate power dissipation ( $T_j=125$ )	$P_{G(AV)}$	0.5	W
Peak gate power	$P_{GM}$	10	W

Peak pulse voltage  
( $T_j=25$  ; non-repetitive,off







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



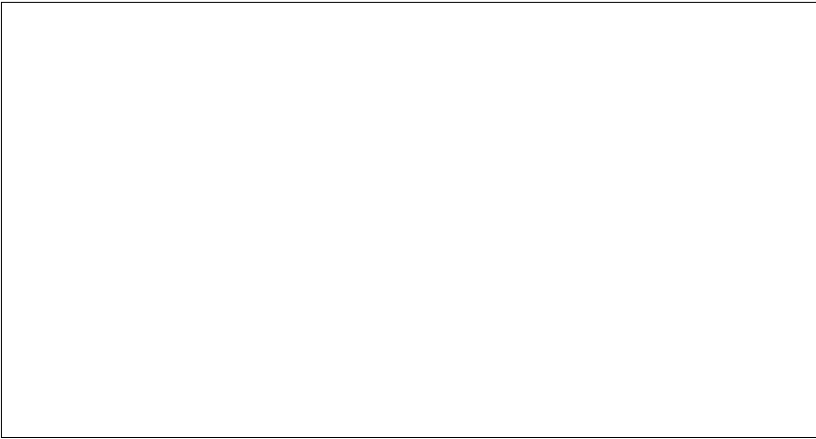
## ORDERING INFORMATION

Order code	Voltage $V_{DRM}/V_{RRM}$ (V)	IGT(mA)		Package	Base qty. (pcs)	Delivery mode
		H- I- J	K			
JST138K-600E	600	10	25	TO-252	80	Tube
JST138K-600E-TR					2,500	Tape & Reel

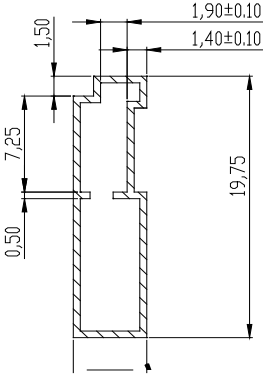
## Document Revision History

Date	Revision	Changes
Apr.14, 2023	A.1.0	Last updated
Oct.22, 2025	A.1.1	Revise PACKAGE MECHANICAL DATA

PACKAGE MECHANICAL DATA



DELIVERY MODE



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