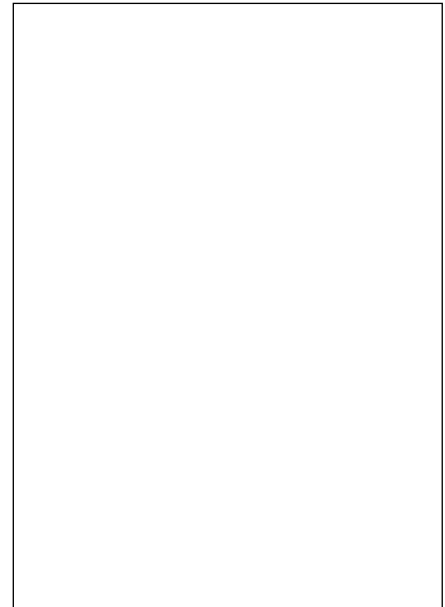


**DESCRIPTION:**

The JST136K-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**

Symbol	Value	Unit
$I_{T(RMS)}$	4	A
$V_{DRM}/V_{RRM}$	600	V
$I_{GT} / / /$	10/10/10/25	mA

**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 ( $T_j=25^\circ C$ )	$V_{DRM}$	600	V	
Repetitive peak reverse voltage ( $T_j=25^\circ C$ )	$V_{RRM}$	600	V	
RMS on-state current ( $T_c 083^\circ C$ )	$I_{T(RMS)}$	4	A	
Non repetitive surge peak on-state current (full cycle, $t_p=20ms$ , $T_j=25^\circ C$ )	$I_{TSM}$	35	A	
Non repetitive surge peak on-state current (full cycle, $t_p=16.6ms$ , $T_j=25^\circ C$ )		38.5		
$I^2t$ value for fusing ( $t_p=10ms$ , $T_j=25^\circ C$ )	$I^2t$	6.1	$A^2s$	
Critical rate of rise of on-state current ( $I_G=2 \times I_{GT}$ , $f=100Hz$ , $T_j=125^\circ C$ )	-	$dl/dt$	80	A s
			40	
Peak gate current ( $t_p=20^\circ s$ , $T_j=125^\circ C$ )	$I_{GM}$	2	A	
Average gate power dissipation ( $T_j=125^\circ C$ )	$P_{G(AV)}$	0.5	W	
Peak gate power	$P_{GM}$	5	W	
Peak pulse voltage ( $T_j=25^\circ C$ ; non-repetitive, off-state; FIG.8)	$V_{pp}$	3.5	kV	

## ELECTRICAL CHARACTERISTICS (unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
$I_{GT}$	$V_D=12V$ $R_L=33$	- -	MAX.	10	mA
				25	
$V_{GT}$		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.	20	mA
		-		30	
$I_H$	$I_T=100mA$		MAX.	25	mA
$dV/dt$	$V_D=400V$ Gate Open $T_j=110$		MIN.	300	V s
$(dV/dt)_c$	$(dI/dt)_c=1.8A/ms$ , $T_j=110$		MIN.	6	9 V
$t_{on}$	$I_G=40mA$ $I_A=200mA$ $I_R=20mA$ $T_j=25$		TYP.	1.5	s
$t_{off}$				15	

## STATIC CHARACTERISTICS

Symbol	Parameter		Value(MAX.)	Unit
$V_{TM}$	$I_{TM}=5A$ $t_p=380$ s	$T_j=25$	1.7	V
$V_{TO}$	Threshold voltage	$T_j=125$	0.94	V
$R_D$	Dynamic resistance	$T_j=125$	124	P
$I_{DRM}$	$V_D=V_{DRM}$ $V_R=V_{RRM}$	$T_j=25$	5	A
$I_{RRM}$		$T_j=125$	0.3	mA

## THERMAL RESISTANCES

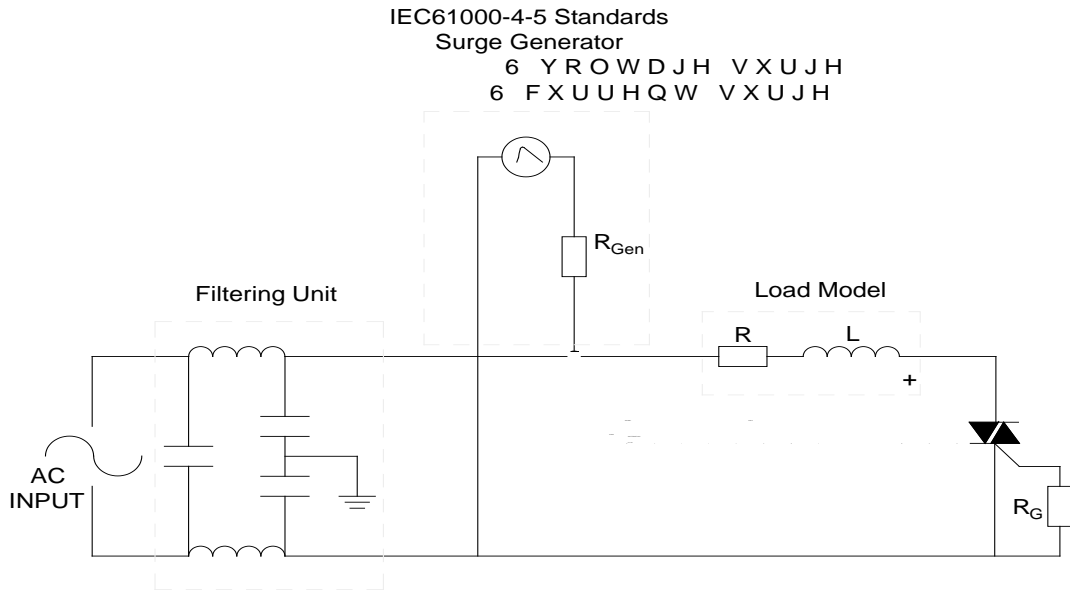
Symbol	Parameter	Value	Unit
$R_{th(j-c)}$	junction to case (AC)	6.5	/W
$R_{th(j-a)}$	junction to ambient (AC)	150	/W



JST136K-600E

JST136K-600E

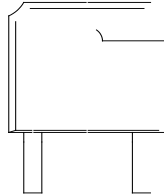
FIG.8 ÖTest circuit for inductive and resistive loads to IEC-61000-4-5 standards



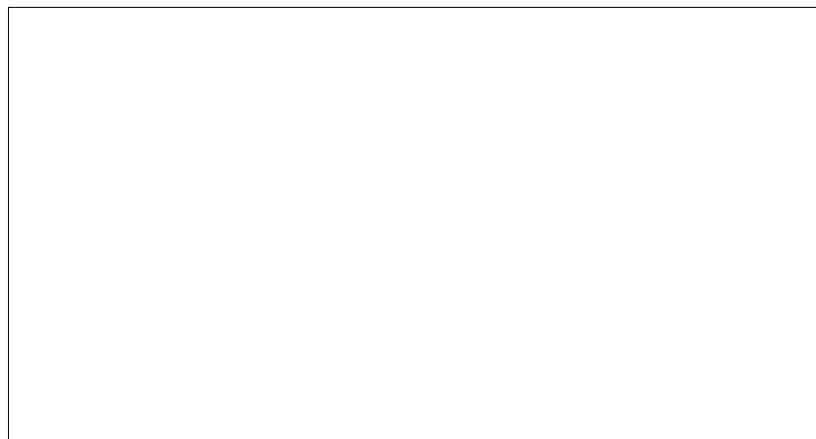
ORDERING INFORMATION

Order code	Voltage $V_{DRM}$
------------	----------------------

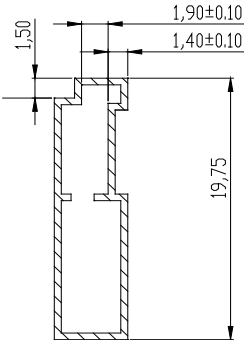
PACKAGE MECHANICAL DATA



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	2.10		2.50	0.083		0.098
A2	0		0.15	0		0.006
B	0.66		0.86	0.026		0.034
B2	5.18		5.48	0.202		0.216
C	0.40		0.60	0.016		0.024
C2	0.44		0.58	0.017		0.023
D	5.90		6.30	0.232		0.248
D1						
E	6.40		6.80	0.252		0.268
E1	4.63			0.182		
G	4.47		4.67	0.176		0.184
G1	2.18		2.38	0.086		0.094
L	1.09		1.21	0.043		0.048
L2	1.35		1.65	0.053		0.065



DELIVERY MODE



Information furnished in this document is believed to be accurate and reliable. However, Jiangsu JieJie Microelectronics Co., Ltd assumes no responsibility for the consequences of use without consideration for such information nor use beyond it. Information mentioned in this document is subject to change without notice, apart from that when an agreement is signed, Jiangsu JieJie complies with the agreement.

Products and information provided in this document have no infringement of patents.

Jiangsu JieJie assumes no responsibility for any infringement of other rights of third

parties which may result from its use.