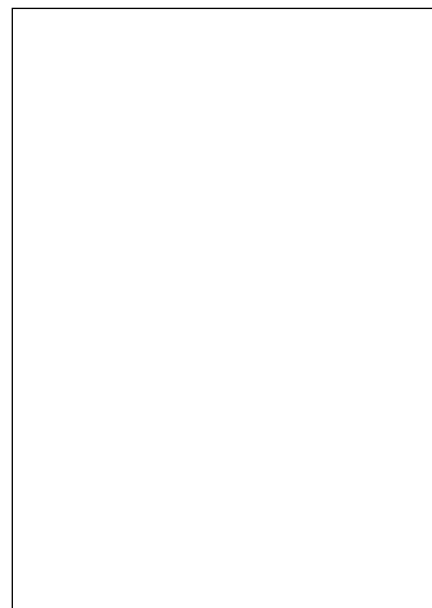


DESCRIPTION:

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 ($I_G=2 \times I_{GT}$, $f=100Hz$, $T_j=125^\circ C$)	-	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

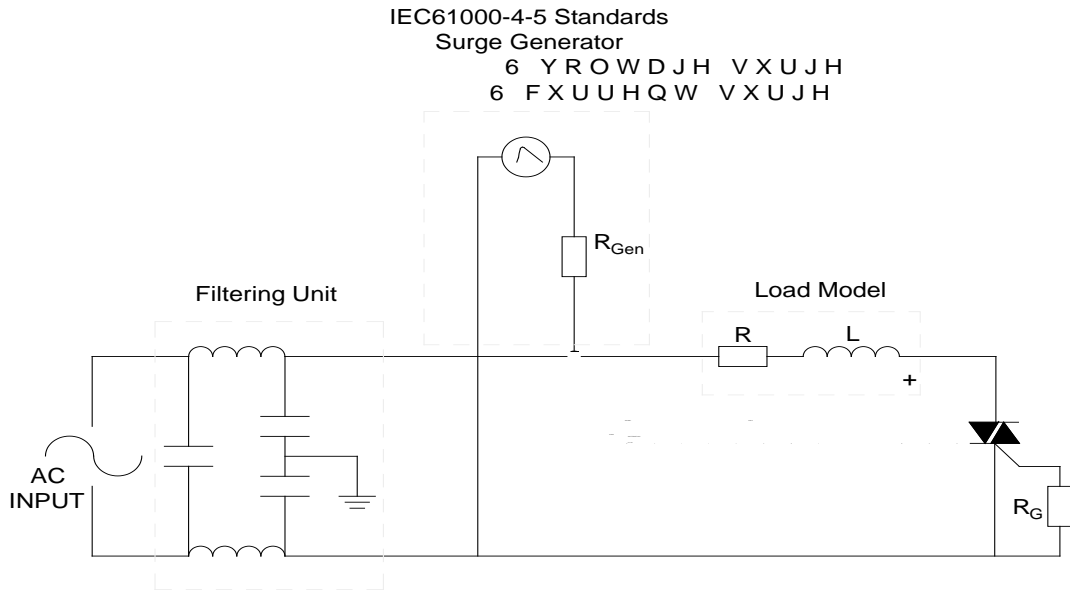
THERMAL RESISTANCES

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

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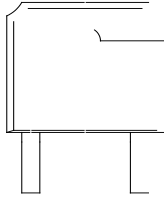
FIG.8 ÖTest circuit for inductive and resistive loads to IEC-61000-4-5 standards



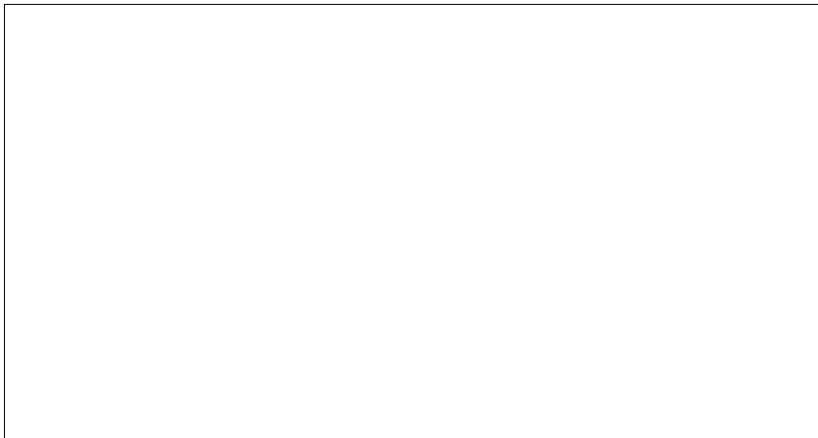
ORDERING INFORMATION

Order code	Voltage V_{DRM}
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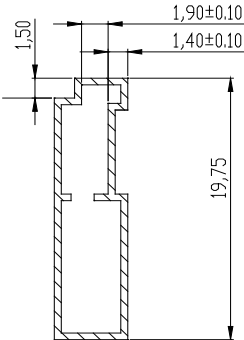
PACKAGE MECHANICAL DATA



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



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