

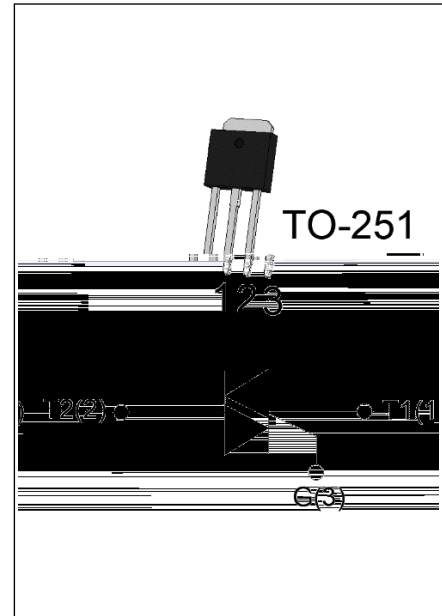


## JST134H-600D 4A TRIAC

Rev.A.1.1

### DESCRIPTION:

The JST134H-600D 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. From T2 terminals to external heatsink. Package TO-251 is RoHS compliant.



### MAIN FEATURES

Symbol	Value	Unit
$I_{T(RMS)}$	4	A
$V_{DRM}/V_{RRM}$	600	V
$I_{GT} / / /$	5/5/5/10	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 ( $T_c = 84^\circ C$ )	$I_{T(RMS)}$	4	A
Non repetitive surge peak on-state current (full cycle, $t_p=20ms$ , $T_j=25^\circ C$ )	$I_{TSM}$	25	A
Non repetitive surge peak on-state current (full cycle, $t_p=16.6ms$ , $T_j=25^\circ C$ )		27.5	
$I^2t$ value for fusing ( $t_p=10ms$ , $T_j=25^\circ C$ )	$I^2t$	3.125	$A^2s$
Critical rate of rise of on-state current ( $I_G=2 \times I_{GT}$ , $f=100Hz$ , $T_j=125^\circ C$ )	$di/dt$	50	$A/\mu s$
		30	
Peak gate current ( $t_p=20\mu s$ , $T_j=125^\circ C$ )	$I_{GM}$	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.7)	$V_{pp}$	3	kV

ELECTRICAL CHARACTERISTICS (T<sub>j</sub>=25 unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
I <sub>GT</sub>	V <sub>D</sub> =12V R <sub>L</sub> =33	- -	MAX.	5	mA
				10	
V <sub>GT</sub>		ALL	MAX.	1	V
V <sub>GD</sub>	V <sub>D</sub> =V <sub>DRM</sub> T <sub>j</sub> =125 R <sub>L</sub> =3.3k	ALL	MIN.	0.2	V
I <sub>L</sub>	I <sub>G</sub> =1.2I <sub>GT</sub>	- -	MAX.	10	mA
				20	
I <sub>H</sub>	I <sub>T</sub> =100mA		MAX.	7	mA
dV/dt	V <sub>D</sub> =400V Gate Open T <sub>j</sub> =110		MIN.	120	V/μs
(dV/dt) <sub>c</sub>	(dI/dt) <sub>c</sub> =1.8A/ms, T <sub>j</sub> =110		MIN.	2.5	V/μs
t <sub>on</sub>	I <sub>G</sub> =20mA I <sub>A</sub> =200mA I <sub>R</sub> =20mA T <sub>j</sub> =25		TYP.	2.5	μs
t <sub>off</sub>				25	

STATIC CHARACTERISTICS

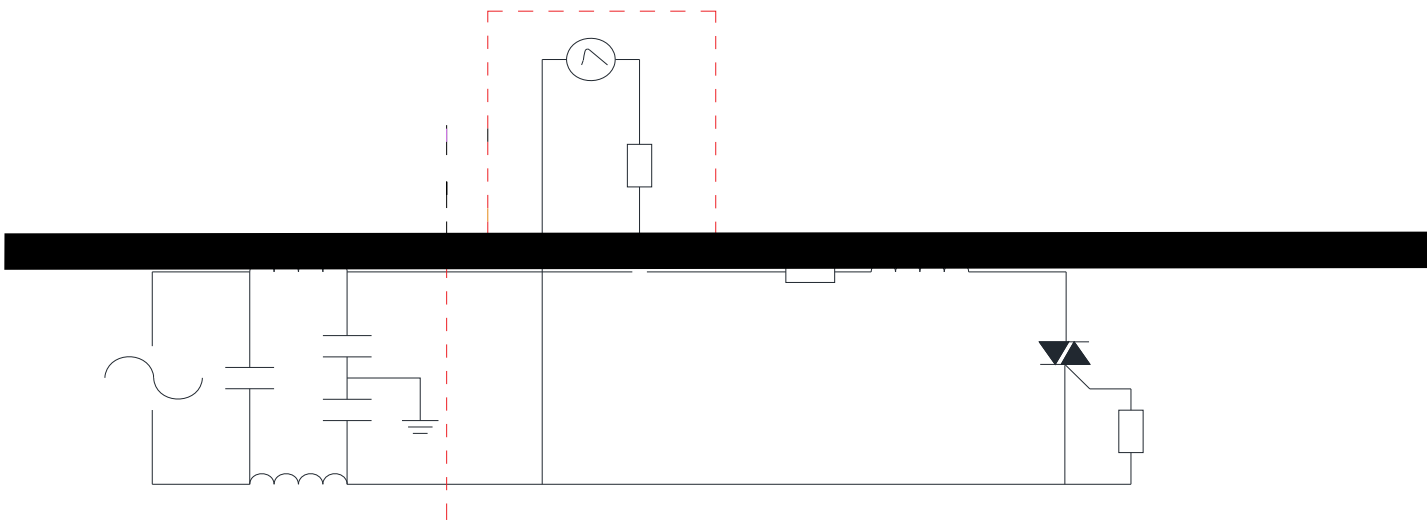
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**FIG.1:** Maximum power dissipation versus RMS on-state current

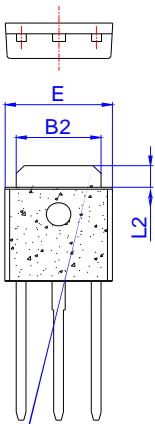
**FIG.2:** Penonate

FIG.7 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards





PACKAGE MECHANICAL DATA



**JST134H-600D**

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