



JST134H-800T 4A TRIAC

Rev.

DESCRIPTION:

The JST134H-800T triac is suitable for general purpose AC switching. It can be used as an ON/OFF function in applications such as heating regulation, speed control on motor starting circuits, for phase control operation of light dimmers, motor speed controllers. From 100V to 250V AC terminals to external heatsink. Package TO-251 is RoHS compliant.

MAIN FEATURES

ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Value	Unit
Storage junction temperature range	T <sub>stg</sub>	-50	
Operating junction temperature range	T <sub>j</sub>	25	
Repetitive peak off-state voltage (T <sub>j</sub> =25°C)	V <sub>DRM</sub>		V
Repetitive peak reverse voltage (T <sub>j</sub> =25°C)	V <sub>RPM</sub>		V
RMS on-state current (T <sub>c</sub> = 84°C)	I <sub>T(RMS)</sub>		A
Non repetitive surge peak on-state current (full cycle , t <sub>p</sub> =20ms , T <sub>j</sub> =25°C)	I <sub>TSM</sub>		A
Non repetitive surge peak on-state current (full cycle , t <sub>p</sub> =16.6ms , T <sub>j</sub> =25°C)			
I <sup>2</sup> t value for fusing (t <sub>p</sub> =10ms , T <sub>j</sub> =25°C)	I <sup>2</sup> t	5	A <sup>2</sup> s

Critical rate of rise of on-state current (I<sub>GT</sub>≠2× I<sub>GT</sub> , / T<sub>m</sub>)

ELECTRICAL CHARACTERISTICS ( $T_j=25$  unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
$I_{GT}$	$V_D=12V$ $R_L=33$	ALL	MAX.	5	mA
$V_{GT}$		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.	9	mA
				13	
$I_H$	$I_T=100mA$		MAX.	5	mA
dV/dt	$V_D=540V$ Gate Open $T_j=110$		MIN.	20	V/ $\mu s$
(dV/dt)c	(dI/dt)c=1.8A/ms, $T_j=110$		MIN.	1.2	V/ $\mu s$
$t_{on}$	$I_G=10mA$ $I_A=200mA$ $I_R=20mA$ $T_j=25$		TYP.	2	$\mu s$
$t_{off}$				20	

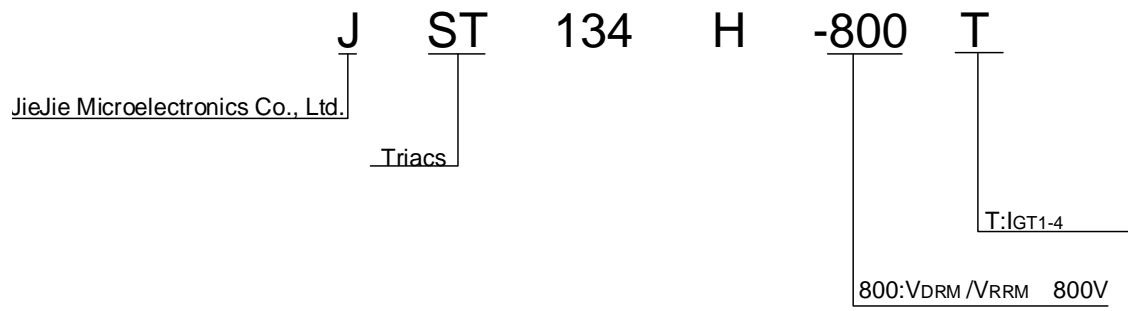
## STATIC CHARACTERISTICS

Symbol	Parameter		Value (MAX.)	Unit
$V_{TM}$	$I_{TM}=5A$ $t_p=380\mu s$	$T_j=25$	1.55	V
$V_{TO}$	Threshold voltage	$T_j=125$	0.92	V
$R_D$	Dynamic resistance	$T_j=125$	107	m
$I_{DRM}$	$V_D=V_{DRM}$ $V_R=V_{RRM}$	$T_j=25$	5	$\mu A$
$I_{RRM}$		$T_j=125$	0.35	mA

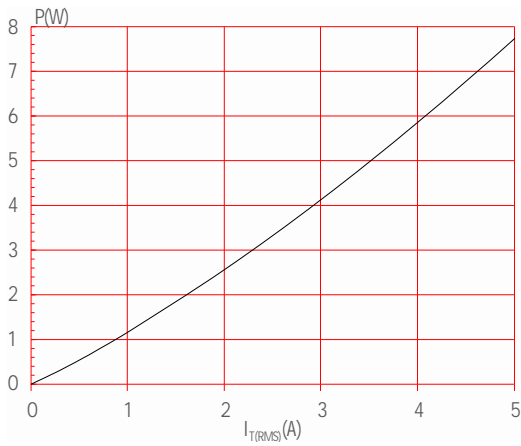
## THERMAL RESISTANCES

Symbol	Parameter	Value	Unit
$R_{th(j-c)}$	junction to case (AC)	7.0	/W
$R_{th(j-a)}$	junction to ambient (AC)	150	/W

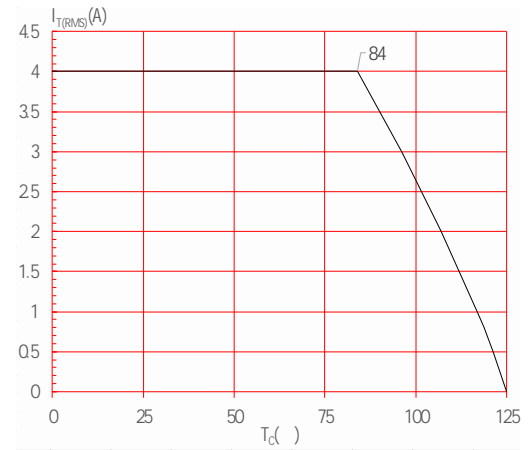
ORDERING INFORMATION



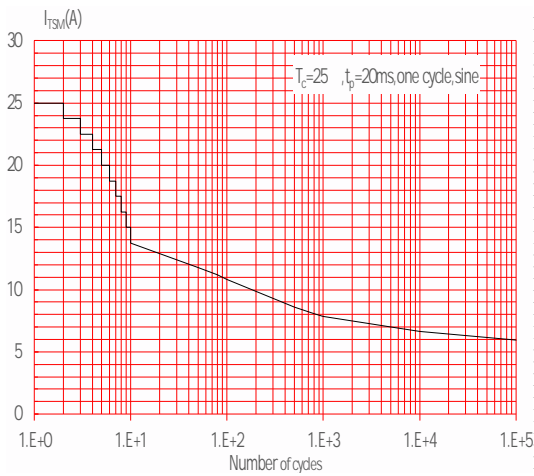
**FIG.1:** Maximum power dissipation versus RMS on-state current



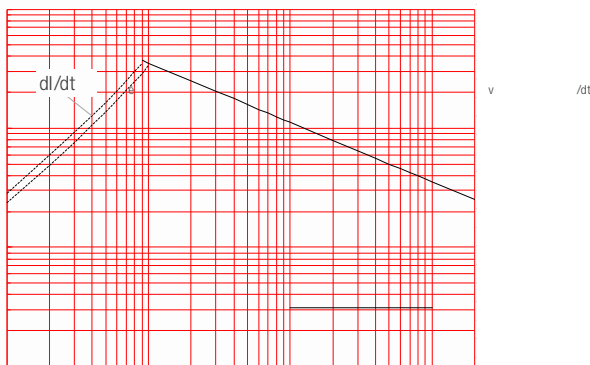
**FIG.2:** RMS on-state current versus case temperature



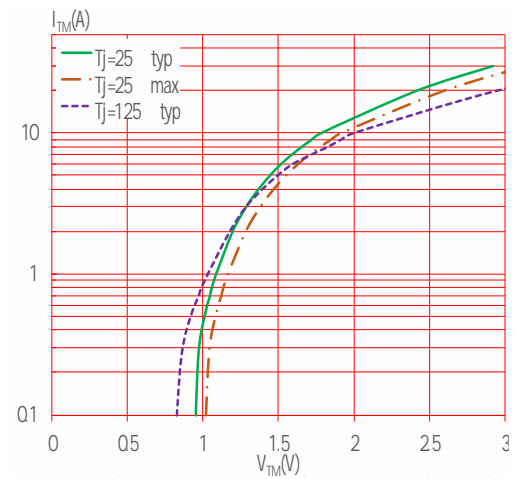
**FIG.3:** Surge peak on-state current versus number of cycles



**FIG.5:** Non-repetitive surge peak on-state current for a sinusoidal pulse with width  $t_p < 20ms$ , and corresponding value of  $I^2t$  ( - :  $di/dt < 30A/\mu s$ ; - :  $di/dt < 20A/\mu s$ )

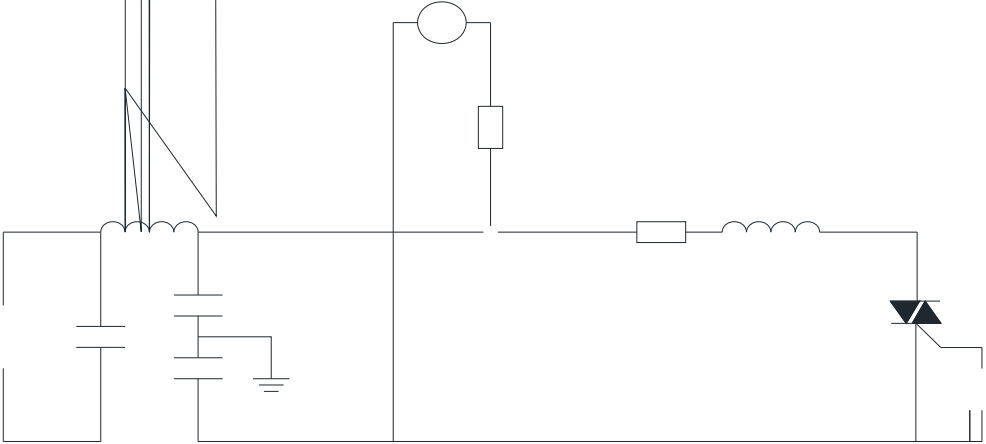


**FIG.4:** On-state characteristics



**FIG.6:** Relative variations of gate trigger current, holding current and latching current versus junction temperature

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



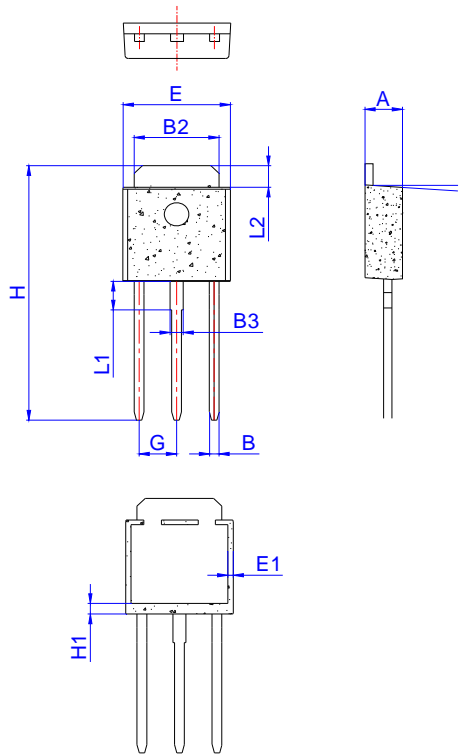
**ORDERING INFORMATION**

Order code	Voltage V <sub>DRM</sub> /V <sub>RRM</sub> (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
		- - \$			
JST134H-800T	800	5	TO-251	80	Tube

**Document Revision History**

Date	Revision	Changes
Apr.14, 2023	A.1.0	Last updated
Oct.24, 2025	A.1.1	Revise PACKAGE MECHANICAL DATA


PACKAGE MECHANICAL DATA



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	2.20		2.40	0.086		0.095
A2	1.00		1.30	0.039		0.051
B	0.50		0.70	0.020		0.028
B2	5.10		5.40	0.200		0.213
B3						
C						
C2						
D						
E						
E1	0.60		1.00	0.024		0.039
G						
H	16.00		17.00	0.630		0.669
H1	1.45		1.85	0.057		0.073
L1						

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