JST134H-800T 4A TRIAC Rev.A.1.1

DESCRIPTION:

The JST134H-800T triac is suitable for g[redacted]purpose AC switching. It can be used as an ON/[redacted]ction in applications such as heating regulation, [redacted]on motor starting circuits, for phase control operat[redacted]ght dimmers, motor speed controllers. From[redacted]minals to external heatsink. Package TO-251 is [redacted]compliant.

MAIN FEATURES

ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	[redacted]e	Unit
Storage junction temperature range	T_{stg}	[redacted]50	
Operating junction temperature range	T_j	[redacted]25	
Repetitive peak off-state voltage (T_j=25[redacted]	V_{DRM}	[redacted]	V
Repetitive peak reverse voltage (T_j=25[redacted]	V_{RRM}	[redacted]	V
RMS on-state current ($T_C \leq 84$)	$I_{T(RMS)}$	[redacted]	A
Non repetitive surge peak on-state cur[redacted] (full cycle , t_p=20ms , T_j=25)	I_{TSM}	[redacted]	A
Non repetitive surge peak on-state cur[redacted] (full cycle , t_p=16.6ms , T_j=25)		[redacted]	
I^2t value for fusing (t_p=10ms , T_j=25)	I^2t	[redacted]5	A^2s
Critical rate of rise of on-state current (I_G≒2 × I_{GT} , / ⊐ Tm ┐			

ELECTRICAL CHARACTERISTICS (T_j=25 unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	V_D=12V R_L=33Ω	ALL	MAX.	5	mA
V_{GT}		ALL	MAX.	1	V
V_{GD}	V_D=V_{DRM} T_j=125 R_L=3.3kΩ	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/μs
(dV/dt)c	(dI/dt)c=1.8A/ms, T_j=110		MIN.	1.2	V/μs
t_{on}	I_G=10mA I_A=200mA I_R=20mA T_j=25		TYP.	2	μs
t_{off}				20	

STATIC CHARACTERISTICS

Symbol	Parameter		Value (MAX.)	Unit
V_{TM}	I_{TM}=5A t_p=380μs	T_j=25	1.55	V
V_{TO}	Threshold voltage	T_j=125	0.92	V
R_D	Dynamic resistance	T_j=125	107	mΩ
I_{DRM}	V_D=V_{DRM} V_R=V_{RRM}	T_j=25	5	μA
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

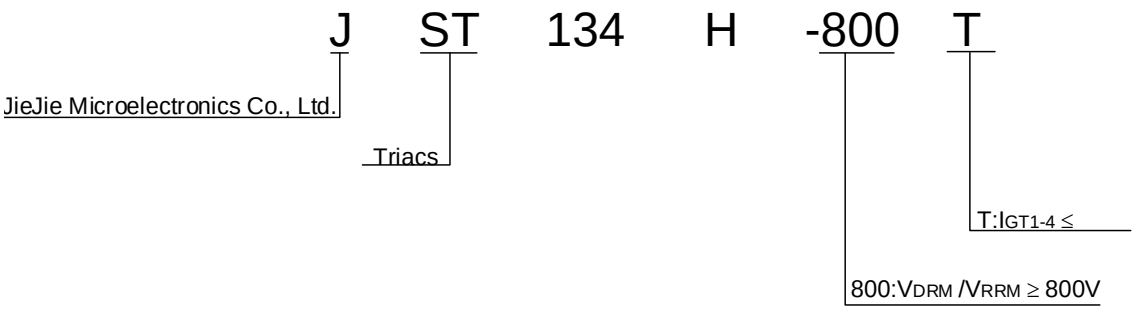


FIG.1: Maximum power dissipation versus RMS on-state current

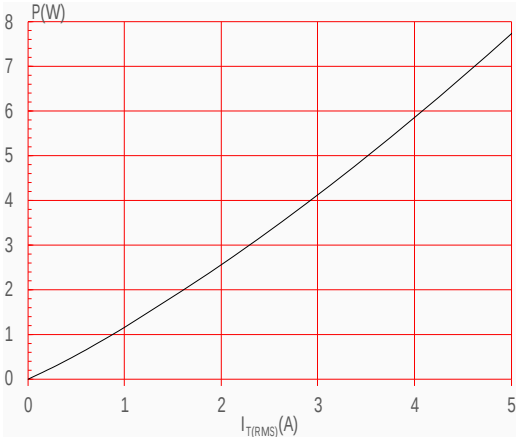


FIG.2: RMS on-state current versus case temperature

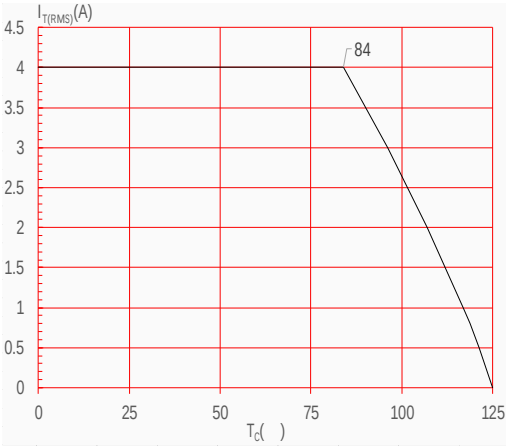


FIG.3: Surge peak on-state current versus number of cycles

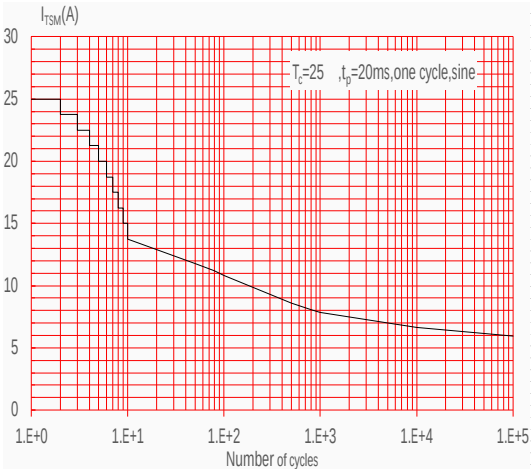


FIG.4: On-state characteristics

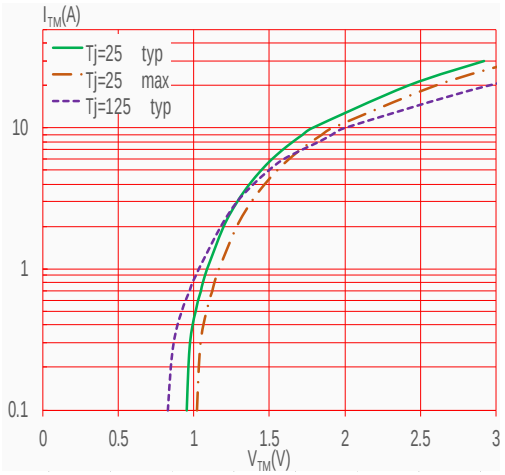


FIG.5: Non-repetitive surge peak on-state current for a sinusoidal pulse with width t_p<20ms, and corresponding value of I^2t

(- : dI/dt<30A/μs; - : dI/dt<20A/μs)

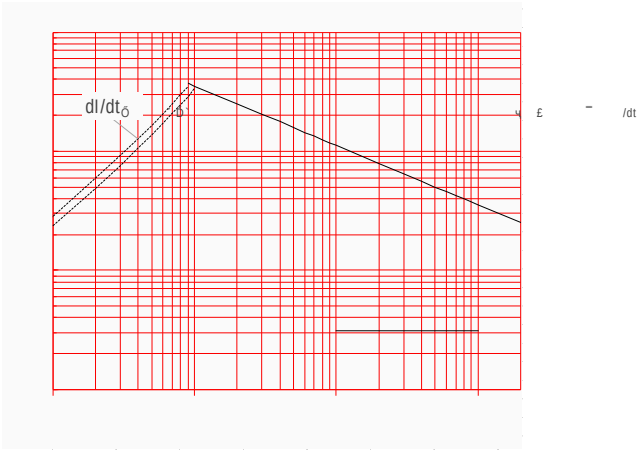
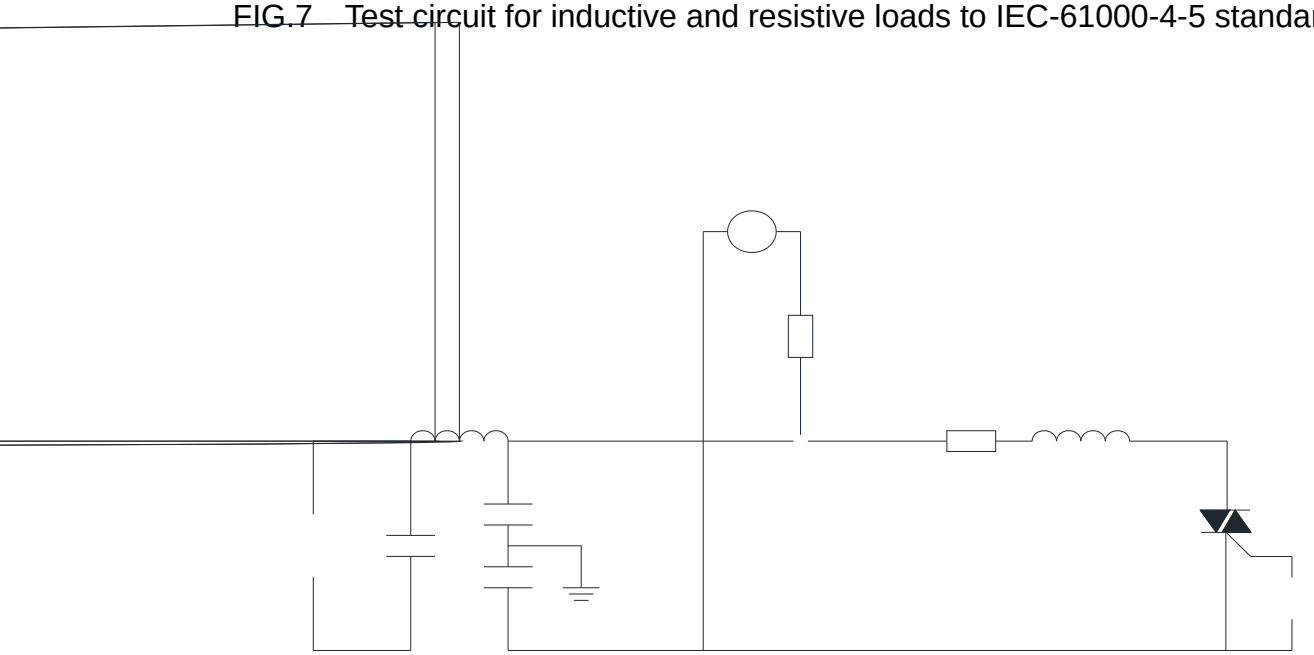


FIG.7 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards



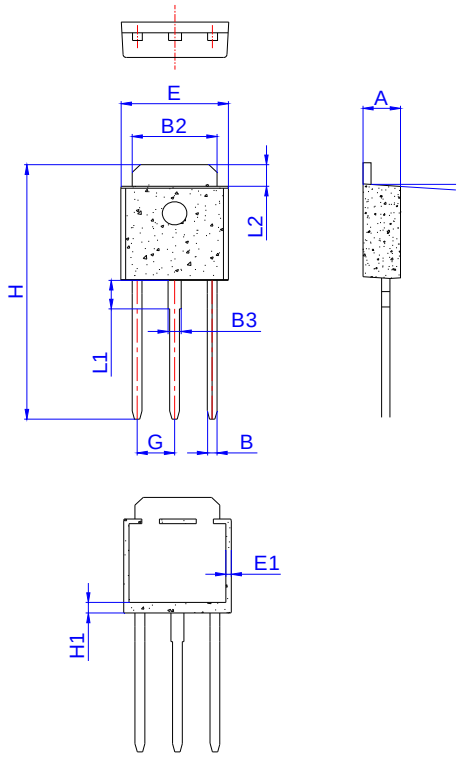
ORDERING INFORMATION

Order code	Voltage V_{DRM}/V_{RRM} (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						