



## JST134C-800E 4A TRIAC

Rev.A.1.0

The JST134C-800E 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-220C is RoHS compliant.

Parameter	Symbol	Value	Unit
Storage junction temperature range	T <sub>stg</sub>	-40-150	
Operating junction temperature range	T <sub>j</sub>	-40-125	
Repetitive peak off-state voltage (T <sub>j</sub> =25 °C)	V <sub>DRM</sub>	800	V
Repetitive peak reverse voltage (T <sub>j</sub> =25 °C)	V <sub>RRM</sub>	800	V
RMS on-state current (T <sub>c</sub> = 110 °C)	I <sub>T(RMS)</sub>	4	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>	25	A
Non repetitive surge peak on-state current (full cycle , t <sub>p</sub> =16.6ms , T <sub>j</sub> =25 °C)		27.5	
I <sup>2</sup> t value for fusing (t <sub>p</sub> =10ms , T <sub>j</sub> =25 °C)	I <sup>2</sup> t	3.125	A <sup>2</sup> s
Critical rate of rise of on-state current (I <sub>G</sub> =2×I <sub>GT</sub> , f=100Hz , T <sub>j</sub> =125 °C)	dI/dt	70	A/s
		40	
Peak gate current (t <sub>p</sub> =20 μs , T <sub>j</sub> =125 °C)	I <sub>GM</sub>	2	A
Average gate power dissipation (T <sub>j</sub> =125 °C)	P <sub>G(AV)</sub>	0.5	W
Peak gate power	P <sub>GM</sub>	5	W
Peak pulse voltage (T <sub>j</sub> =25 °C ; non-			

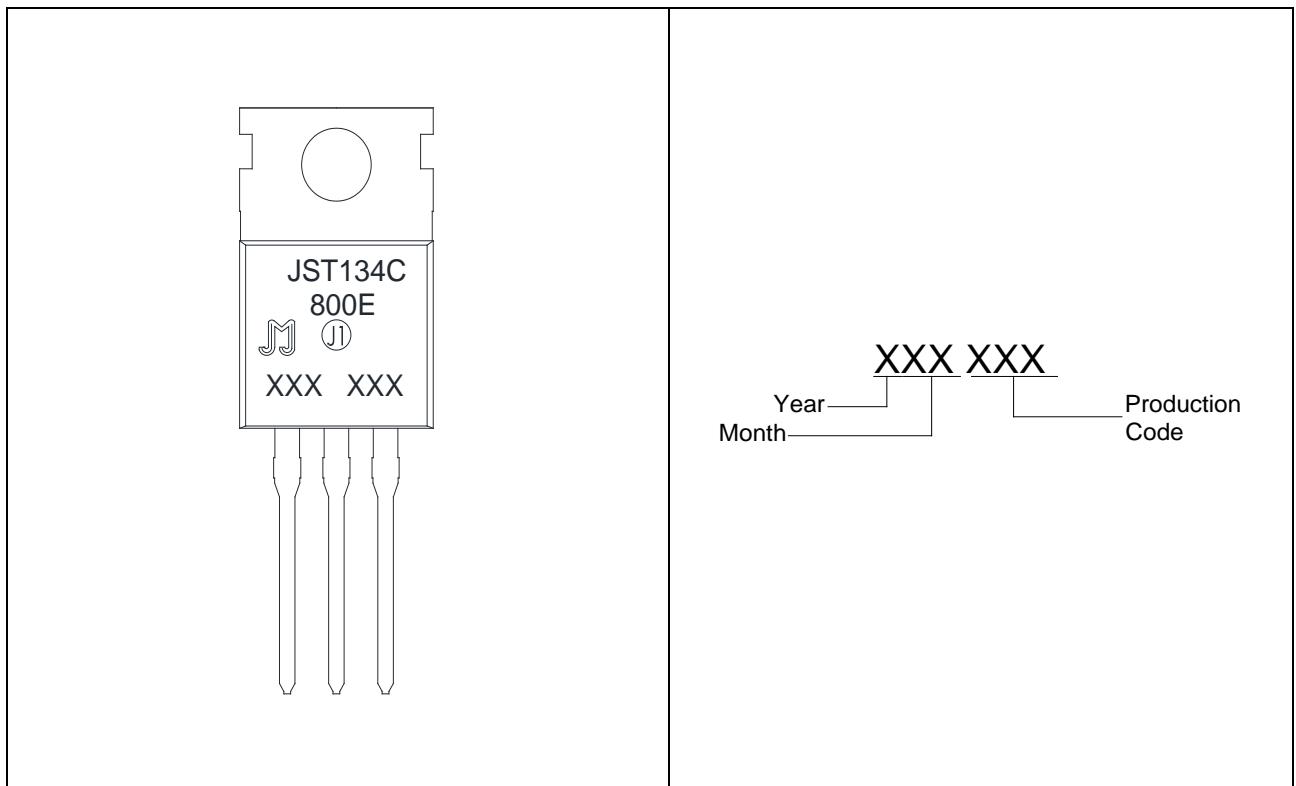
(T<sub>j</sub>=25 unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
I <sub>GT</sub>	V <sub>D</sub> =12V R <sub>L</sub> =33	- -	MAX.	10	mA
				25	
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.	15	mA
				25	
I <sub>H</sub>	I <sub>T</sub> =100mA		MAX.	20	mA
dV/dt	V <sub>D</sub> =540V Gate Open T <sub>j</sub> =110		MIN.	250	V s
(dV/dt)c	(dI/dt)c=1.8A/ms, T <sub>j</sub> =110		MIN.	6	
t <sub>on</sub>	I <sub>G</sub> =40mA I <sub>A</sub> =200mA I <sub>R</sub> =20mA T <sub>j</sub> =25	TYP.	3	s	
t <sub>off</sub>			30		

Symbol	Parameter		Value (MAX.)	Unit
V <sub>TM</sub>	I <sub>TM</sub> =5A t <sub>p</sub> =380 s	T <sub>j</sub> =25	1.55	V
V <sub>TO</sub>	Threshold voltage	T <sub>j</sub> =125	0.92	V
R <sub>D</sub>	Dynamic resistance	T <sub>j</sub> =125	107	
I <sub>DRM</sub>	V <sub>D</sub> =V <sub>DRM</sub> V <sub>R</sub> =V <sub>RRM</sub>	T <sub>j</sub> =25	5	A
I <sub>RRM</sub>		T <sub>j</sub> =125	0.35	mA

Symbol	Parameter	Value	Unit
R <sub>th(j-c)</sub>	junction to case (AC)	2.5	/W
R <sub>th(j-a)</sub>	junction to ambient (AC)	60	/W

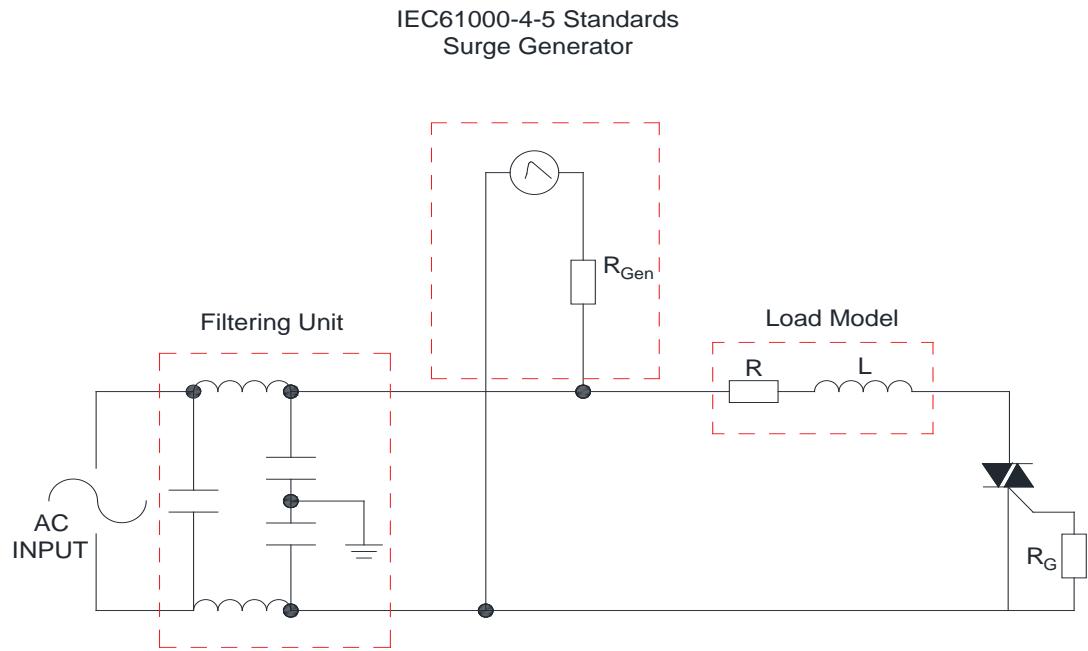
<b>J</b>	<b>ST</b>	<b>134</b>	<b>C</b>	<b>-800</b>	<b>E</b>
JieJie Microelectronics Co., Ltd.					
	Triacs				
		IT(RMS):4A			
			C:TO-220C		
				800:V <sub>DRM</sub> / V <sub>RRM</sub> 800V	
				E:IGT1-3 10mA IGT4 25mA	



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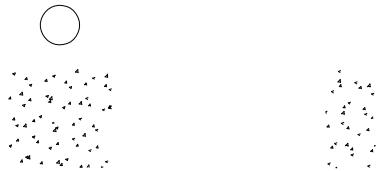
FIG.7 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards



Order code	Voltage $V_{DRM}/V_{RRM}$ (V)	IGT(mA)		Package	Base qty. (pcs)	Delivery mode
		H	I			
<b>JST134C-800E</b>	<b>800</b>	<b>10</b>	<b>25</b>	<b>TO-220C</b>	<b>50</b>	<b>Tube</b>

#### Document Revision History

Date	Revision	Changes
Apr.14, 2023	A.1.0	Last updated



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