



Rev.A.1.1

The JST136H-800D 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.

Symbol	Value	Unit
$I_{T(RMS)}$	4	A
V_{DRM}/V_{RRM}	800	V

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 ($T_j=25^\circ\text{C}$)		V_{DRM}	800	V
Repetitive peak reverse voltage ($T_j=25^\circ\text{C}$)		V_{RRM}	800	V
RMS on-state current ($T_c \leq 83^\circ\text{C}$)		$I_{\text{T(RMS)}}$	4	A
Non repetitive surge peak on-state current (full cycle , $t_p=20\text{ms}$, $T_j=25^\circ\text{C}$)		I_{TSM}	35	A
Non repetitive surge peak on-state current (full cycle , $t_p=16.6\text{ms}$, $T_j=25^\circ\text{C}$)			38.5	
I^2t value for fusing ($t_p=10\text{ms}$, $T_j=25^\circ\text{C}$)		I^2t	6.1	A^2s
Critical rate of rise of on-state current ($I_G=2 \times I_{GT}$, $f=100\text{Hz}$, $T_j=125^\circ\text{C}$)	- -	di/dt	50	$\text{A}/\mu\text{s}$
			40	
Peak gate current ($t_p=20\mu\text{s}$, $T_j=125^\circ\text{C}$)		I_{GM}	2	A
Average gate power dissipation ($T_j=125^\circ\text{C}$)		$P_{G(AV)}$	0.5	W
Peak gate power		P_{GM}	5	W
Peak pulse voltage ($T_j=25^\circ\text{C}$; non-repetitive,off-state;FIG.7)		V_{pp}	3.5	kV

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

Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	$V_D=12V$ $R_L=33\Omega$	- -	MAX.	5	mA
				10	
V_{GT}		ALL	MAX.	1	V
V_{GD}	$V_D=V_{DRM}$ $T_j=125$ $R_L=3.3k\Omega$	ALL	MIN.	0.2	V
I_L	$I_G=1.2I_{GT}$	-	MAX.	15	mA
		-		25	
I_{AS}	$I_G=100mA$		MAX.	15	mA
dv/dt	$V_D=540V$ Gate Open $T_j=110$		MIN.	100	V/ μs
$(dV/dt)_c$	$(dI/dt)_c=1.8A/ms$, $T_j=110$		MIN.	2.5	V/ μs
t_{on}	$I_G=20mA$ $I_A=200mA$ $I_R=20mA$ $T_j=25$		TYP.	1	μs
t_{off}				12	

STATIC CHARACTERISTICS

Symbol	Parameter		Value(MAX.)	Unit
V_{TM}	$I_{TM}=5A$ $t_p=380\mu s$	$T_j=25$	1.7	V
V_{TO}	Threshold voltage	$T_j=125$	0.94	V
RD	Dynamic resistance	$T_j=125$	124	m Ω
I_{DRM}	$V_D=V_{DRM}$ $V_R=V_{RRM}$	$T_j=25$	5	μA
I_{RRM}		$T_j=125$	0.4	m

ORDERING INFORMATION

J ST 136 H -800 D T

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

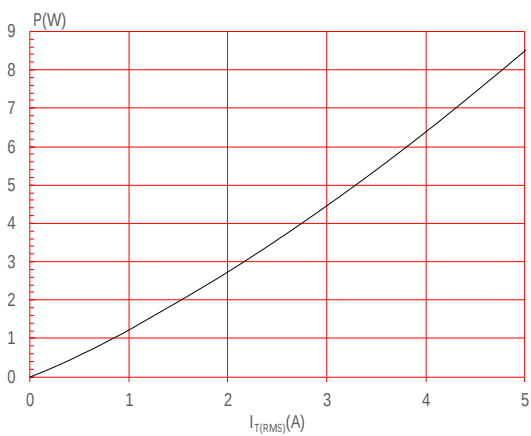
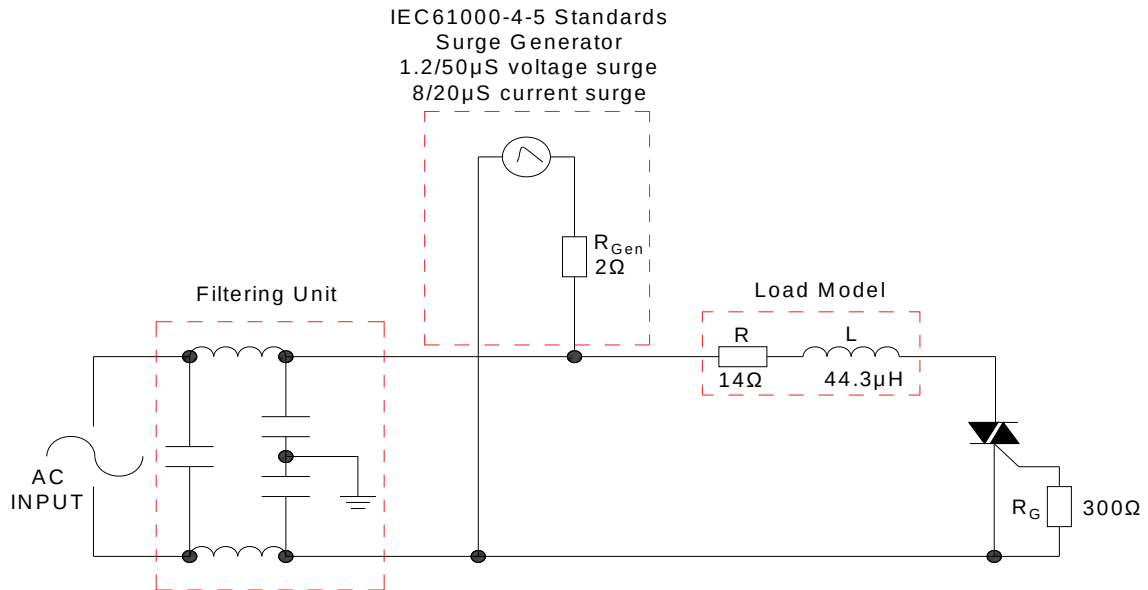


FIG.2: RMS on-state current versus case temperature



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



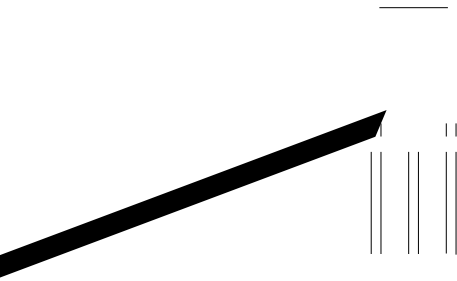
LEAD FORMING AND SOLDERING

Refer to the application note “Assembly Instructions for Thyristors in Through-hole Package” released by JieJie Microelectronics

ORDERING INFORMATION

Order code	Voltage V _{DRM} /V _{R_{RM}} (V)	IGT(mA)		Package	Base qty. (pcs)	Delivery mode
		- -				
JST136H-800D	800	5	10	TO-251	80	Tu

Date	Revision	Changes	φ	н	l



Information furnished in this document is believed to be accurate and reliable. However, Jiangsu JieJie Microelectronics Co., Ltd assumes no responsibility for the consequences of use without consideration for such information nor use beyond it. Information mentioned in this document is subject to change without notice, apart from that when an agreement is signed, Jiangsu JieJie complies with the agreement.

Products and information provided in this document have no infringement of patents. Jiangsu JieJie assumes no responsibility for any infringement of other rights of third parties which may result from the use of such products and information. This document supersedes and replaces all information previously supplied.



is a registered trademark of Jiangsu JieJie Microelectronics Co., Ltd.

Copyright © 2025 Jiangsu JieJie Microelectronics Co., Ltd. All rights reserved.