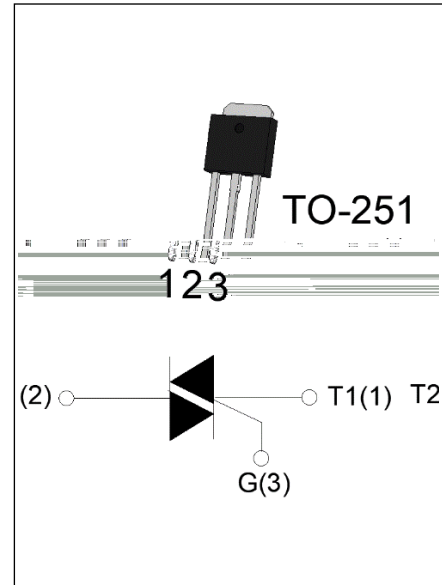


JST08H-800B 8A TRIAC

Rev.A.1.1

DESCRIPTION:

The JST08H-800B 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
$I_{T(RMS)}$	8	A
V_{DRM}/V_{RRM}	800	V
$I_{GT} / / /$	50/50/50/70	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 ($T_j=25^\circ\text{C}$)		V_{DRM}	800	V
Repetitive peak reverse voltage ($T_j=25^\circ\text{C}$)		V_{RRM}	800	V
RMS on-state current ($T_c 091^\circ\text{C}$)		$I_{T(RMS)}$	8	A
Non repetitive surge peak on-state current (full cycle, $t_p=20\text{ms}$, $T_j=25^\circ\text{C}$)		I_{TSM}	80	A
Non repetitive surge peak on-state current (full cycle, $t_p=16.6\text{ms}$, $T_j=25^\circ\text{C}$)			88	
I^2t value for fusing ($t_p=10\text{ms}$, $T_j=25^\circ\text{C}$)		I^2t	32	A^2s
Critical rate of rise of on-state current ($I_G=2 I_{GT}$, $f=100\text{Hz}$, $T_j=125^\circ\text{C}$)	-	di/dt	100	$\text{A}/\mu\text{s}$
	-		50	
Peak gate current ($t_p=20\mu\text{s}$, $T_j=125^\circ\text{C}$)		I_{GM}	4	A
Average gate power dissipation ($T_j=125^\circ\text{C}$)		$P_{G(AV)}$	0.5	W
Peak gate power		P_{GM}	10	W
Peak pulse voltage ($T_j=25^\circ\text{C}$; non-repetitive, off-state; FIG.7)		V_{PP}	1.5	kV

ELECTRICAL CHARACTERISTICS (T_j=25 unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
I _{GT}	V _D =12V R _L =33	- -	MAX.	50	mA
				70	
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.	50	mA
				100	
I _H	I _T =200mA		MAX.	60	mA
dV/dt	V _D =540V Gate Open T _j =125		MIN.	1000	V/μs
(dV/dt) _c	(dI/dt) _c =3.5A/ms, T _j =125		MIN.	12	V/μs
t _{on}	I _G =80mA I _A =400mA I _R =40mA T _j =25		TYP.	5	μs
t _{off}				30	

STATIC CHARACTERISTICS

ORDERING INFORMATION

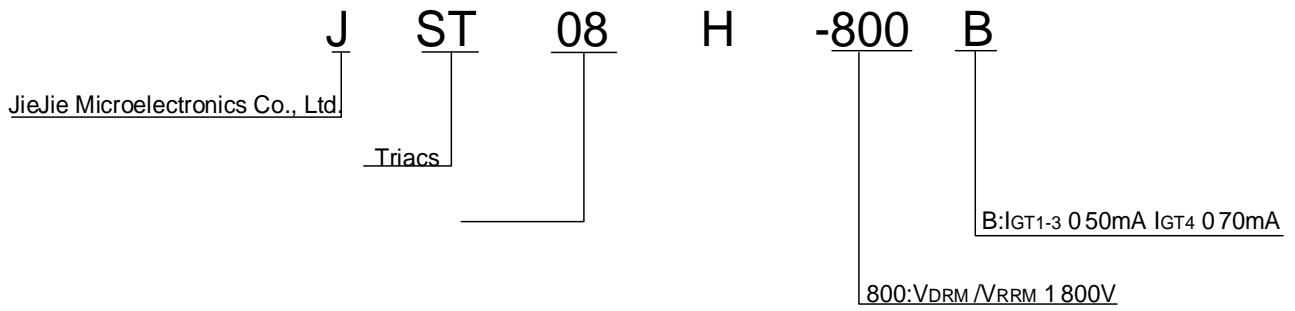


FIG.1: Maximum power dissipation versus RMS on-state current

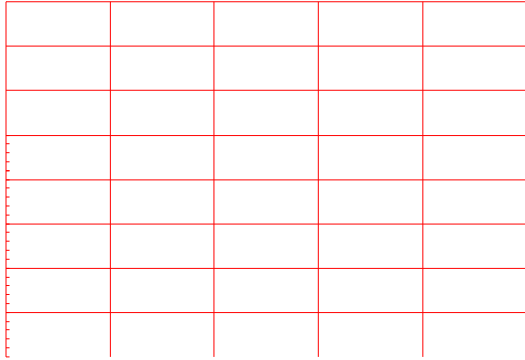
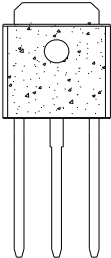
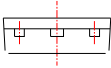



FIG.2: RMS on-state current versus case temperature

PACKAGE MECHANICAL DATA



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