



JST04H-800BW 4A TRIAC

Rev.A.1.0

The JST04H-800BW triac is suitable for general purpose AC switching. It can be used as an ON/OFF function in

application. Application Note (52) (1) 2015.11.11 8:10:00 (F) 0.06 0.17 0.27 (N) 0.41 0.51 0.61 0.71 0.81 0.91 1.01 1.11 1.21 1.31 1.41 1.51 1.61 1.71 1.81 1.91 2.01 2.11 2.21 2.31 2.41 2.51 2.61 2.71 2.81 2.91 3.01 3.11 3.21 3.31 3.41 3.51 3.61 3.71 3.81 3.91 4.01 4.11 4.21 4.31 4.41 4.51 4.61 4.71 4.81 4.91 5.01 5.11 5.21 5.31 5.41 5.51 5.61 5.71 5.81 5.91 6.01 6.11 6.21 6.31 6.41 6.51 6.61 6.71 6.81 6.91 7.01 7.11 7.21 7.31 7.41 7.51 7.61 7.71 7.81 7.91 8.01 8.11 8.21 8.31 8.41 8.51 8.61 8.71 8.81 8.91 9.01 9.11 9.21 9.31 9.41 9.51 9.61 9.71 9.81 9.91 10.01

Peak pulse voltage ($T_j=25$; non-repetitive, off-state; FIG.7)	V_{pp}	4	kV
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($T_j=25$ unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	$V_D=12V R_L=33$	- -	MAX.	50	mA
V_{GT}		- -	MAX.	1	V
V_{GD}	$V_D=V_{DRM} T_j=125$ $R_L=3.3K$	- -	MIN.	0.2	V
I_L	$I_G=1.2I_{GT}$	-	MAX.	70	mA
				80	
I_H	$I_T=100mA$		MAX.	60	mA
dV/dt	$V_D=540V$ Gate Open $T_j=125$		MIN.	1500	V s
(dI/dt) _c	(dV/dt) _c =20V s, $T_j=125$		MIN.	10	A/ms
t_{on}	$I_G=80mA I_A=400mA I_R=40mA$ $T_j=25$		TYP.	5	s
t_{off}				50	

Symbol	Parameter		Value(MAX.)	Unit
V_{TM}	$I_{TM}=5A t_p=380$ s	$T_j=25$	1.65	V
V_{TO}	Threshold voltage	$T_j=125$	0.799	V
R_D	Dynamic resistance	$T_j=125$	151	
I_{DRM}	$V_D=V_{DRM} V_R=V_{RRM}$	$T_j=25$	5	A
I_{RRM}		$T_j=125$	0.25	mA

Symbol	Parameter	Value	Unit
$R_{th(j-c)}$	junction to case (AC)	4.5	/W
$R_{th(j-a)}$	junction to ambient (AC)	120	/W

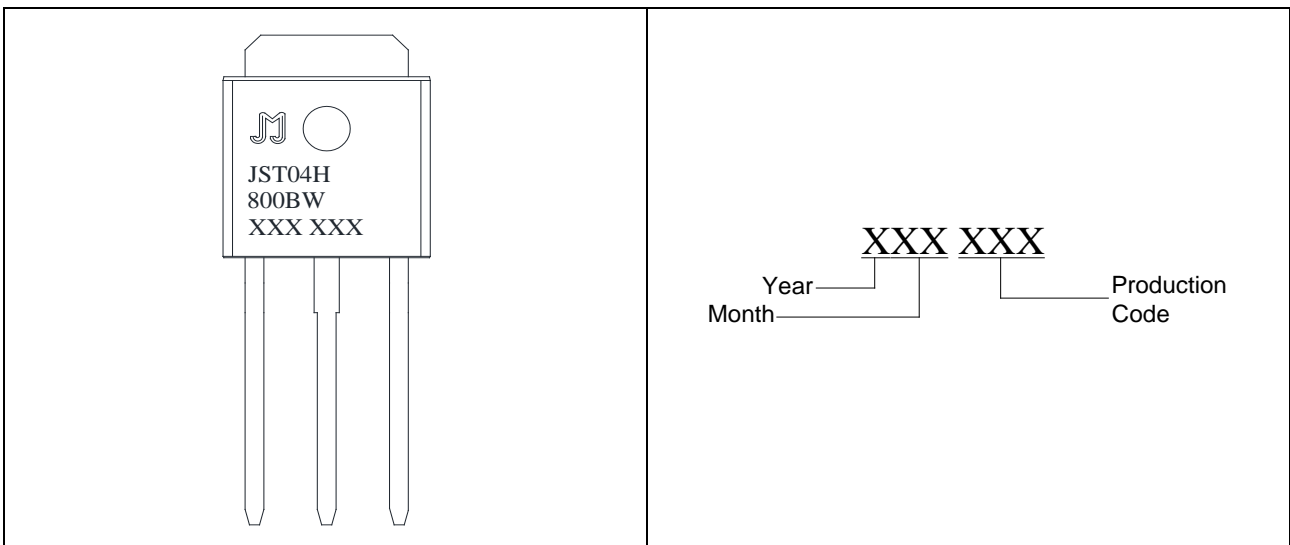
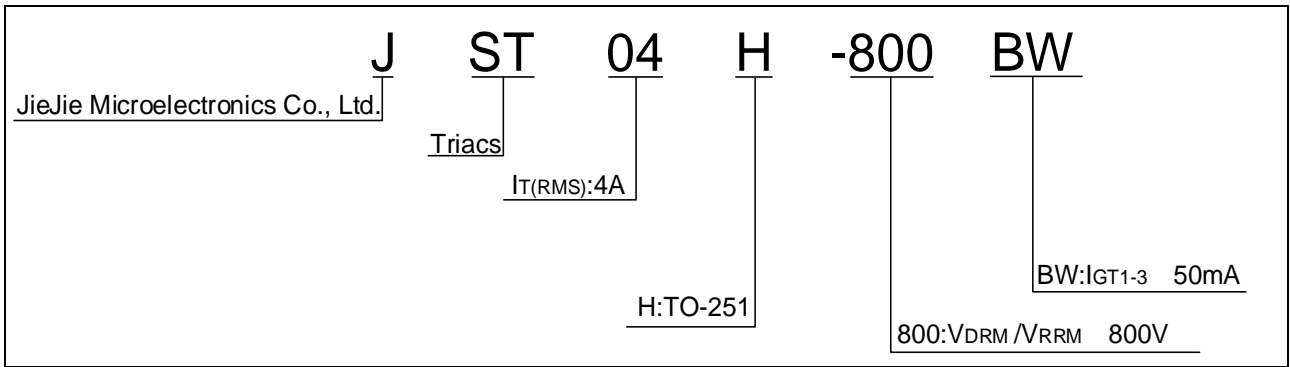


FIG.1 Maximum power dissipation versus RMS on-state current

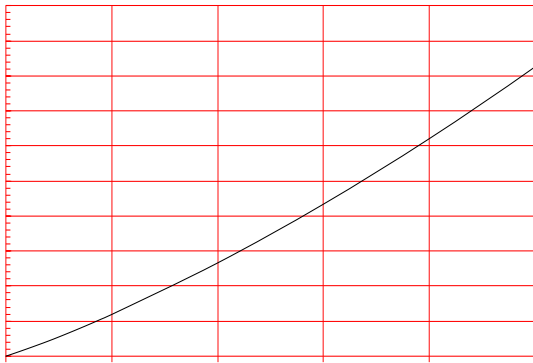


FIG.2: RMS on-state current versus case temperature

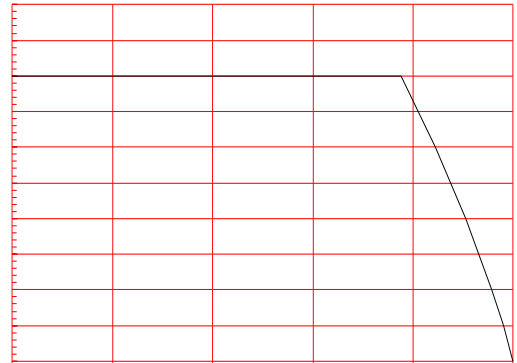


FIG.3: Surge peak on-state current versus number of cycles

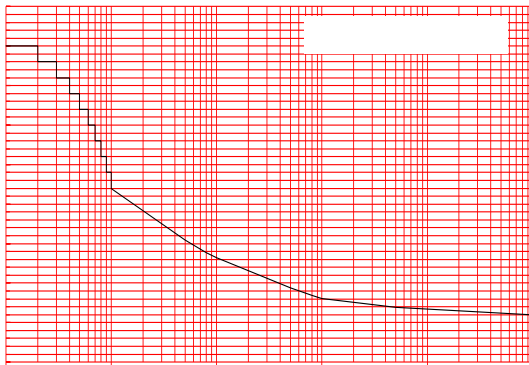


FIG.4: On-state characteristics

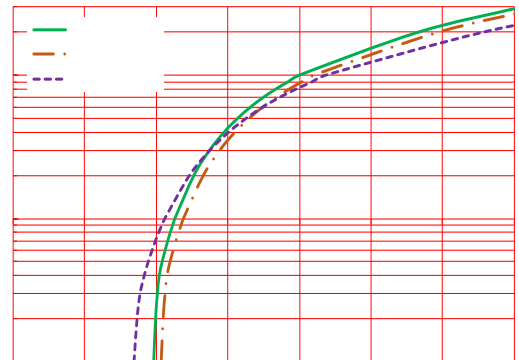


FIG.5: Non-repetitive surge peak on-state current for a sinusoidal pulse with width $t_p < 20\text{ms}$, and corresponding value of I^2t ($di/dt < 100$)

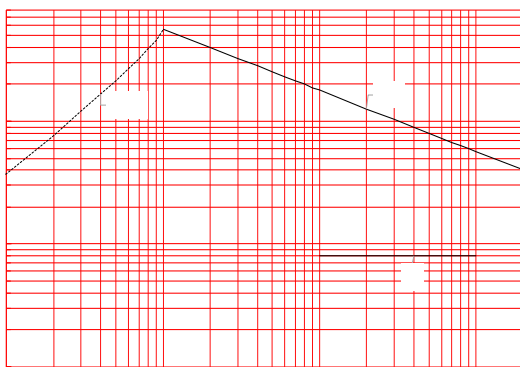


FIG.6: Relative variations of gate trigger current, holding current and latching current versus junction temperature

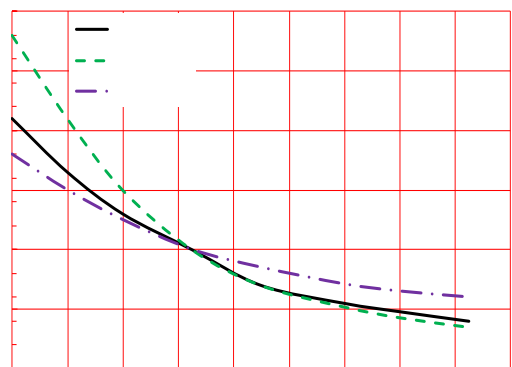
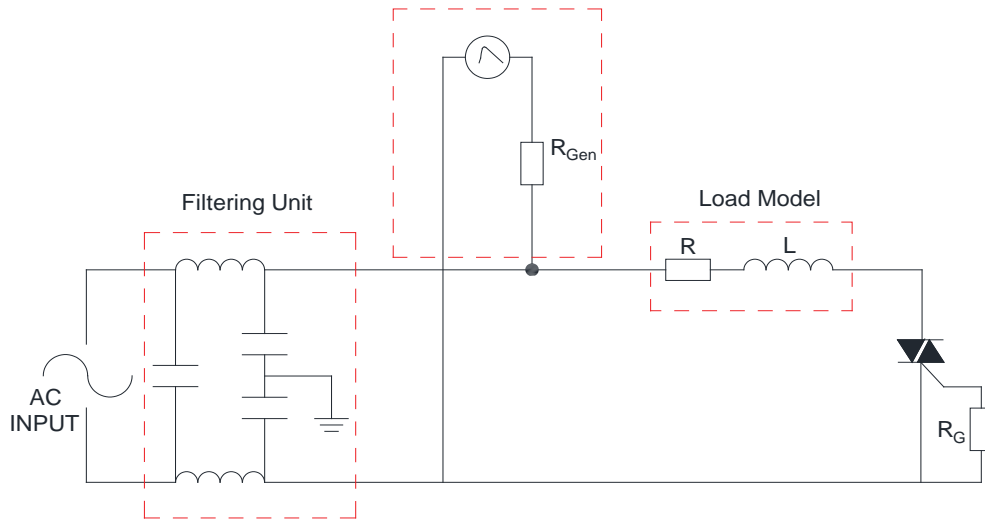


FIG.7 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards

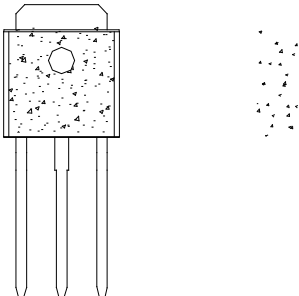
IEC61000-4-5 Standards
Surge Generator



Order code	Voltage V_{DRM}/V_{RRM} (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
		- -			
JST04H-800BW	800	50	TO-251	80	Tube

Document Revision History

Date	Revision	Changes
Apr.11, 2023	A.1.0	Last updated



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