

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 s
(dV/dt) _c	(dI/dt) _c =3.5A/ms, T _j =125		MIN.	12	9 V
t _{on}	I _G =80mA I _A =400mA I _R =40mA T _j =25		TYP.	5	s
t _{off}				30	

STATIC CHARACTERISTICS

Symbol	Parameter		Value(MAX.)	Unit
V _{TM}	I _{TM} =11A t _p =380 s	T _j =25	1.5	V
V _{TO}	Threshold voltage	T _j =125	0.81	V
R _D	Dynamic resistance	T _j =125	44	P
I _{DRM}	V _D =V _{DRM} V _R =V _{RRM}	T _j =25	5	A
I _R RM		T _j =125	0.35	mA

THERMAL RESISTANCES

Symbol	Parameter	Value	Unit
R _{th(j-c)}	junction to case (AC)	1.6	/W
R _{th(j-a)}	junction to ambient (AC, in free air, S=2cm		

JST08E-800B

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

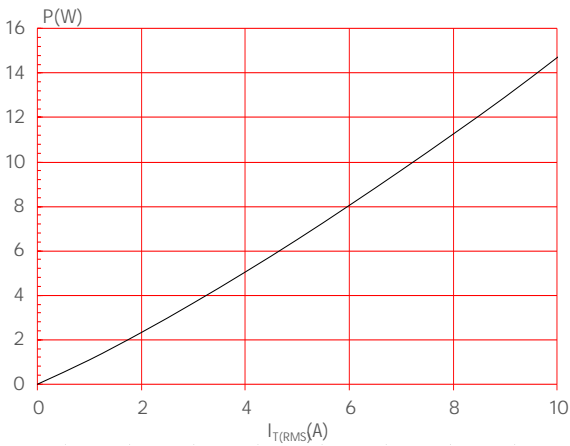


FIG.2: RMS on-state current versus case temperature

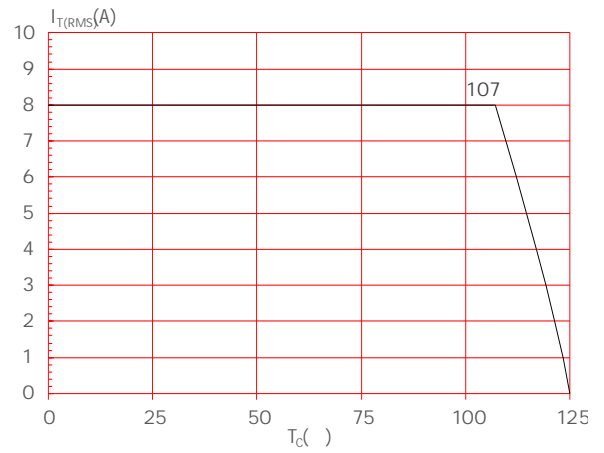


FIG.3: RMS on-state current versus ambient temperature (printed circuit board FR4,copper WKLFNQHVV P IXOO F\FOH

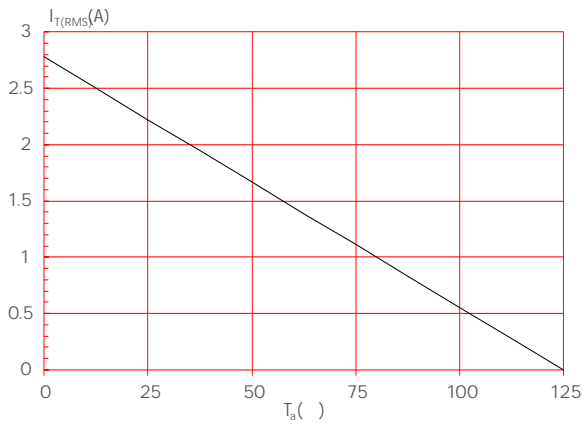


FIG.4: Surge peak on-state current versus number of cycles

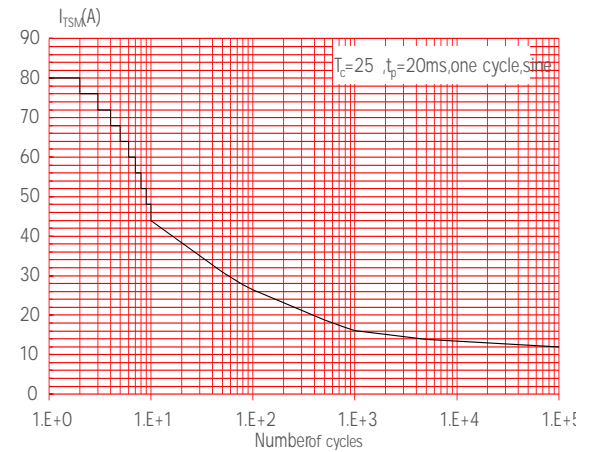


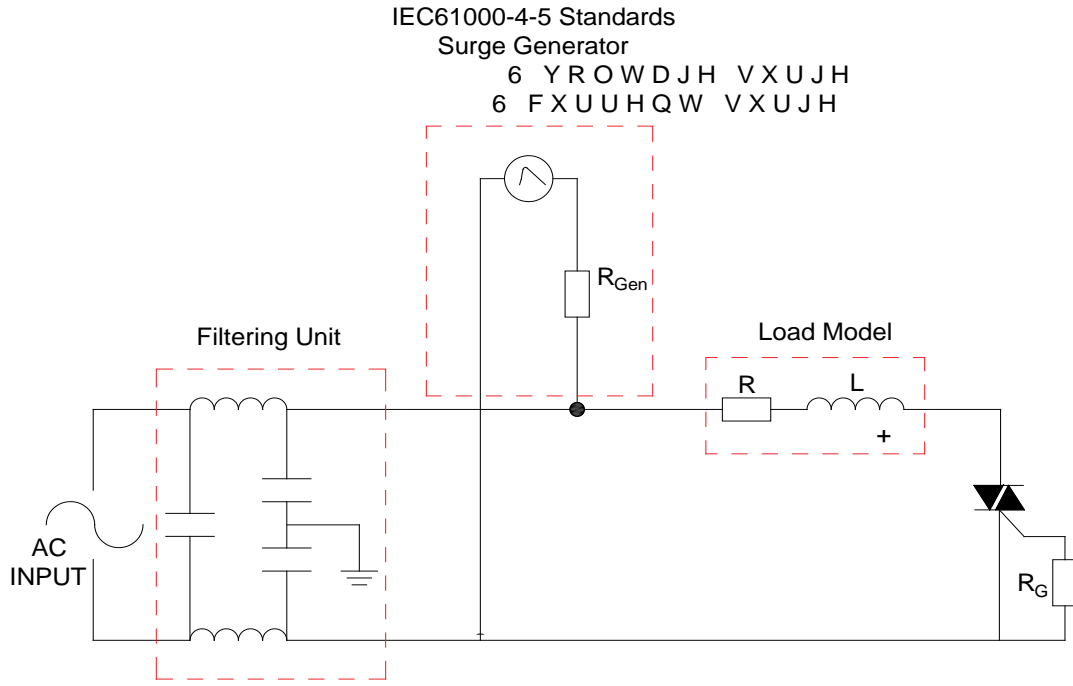
FIG.5: On-state characteristics

FIG.6: Non-repetitive surge peak on-state current for a sinusoidal pulse with width $t_p < 20ms$, and corresponding value of I^2t (-

FIG.7: Relative variations of gate trigger current, holding current and latching current versus junction temperature



FIG.8: 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
		-	-			
JST08E-800B	800	50	70	TO-263	50	Tube
JST08E-800B-TR					800	Tape & Reel

Document Revision History

Date	Revision	Changes
Apr.14, 2023	A.1.0	Last updated
Oct.20, 2025	A.1.1	Revise PACKAGE MECHANICAL DATA

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DELIVERY MODE

