Peak gate voltage (T_j=25 ; non-repetitive, see FIG.7)	V_{GP}	2.5	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
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.	50	mA
				90	
I_H	I_T=100mA		MAX.	50	mA
dV/dt	V_D=400V Gate Open T_j=125		MIN.	2000	V/ s
(dI/dt)c	(dV/dt)c=20V/ s T_j=125		MIN.	12	A/ms
t_{gt}	I_G=80mA I_A=400mA I_R=40mA T_j=25		TYP.	5	s
t_{gf}				50	

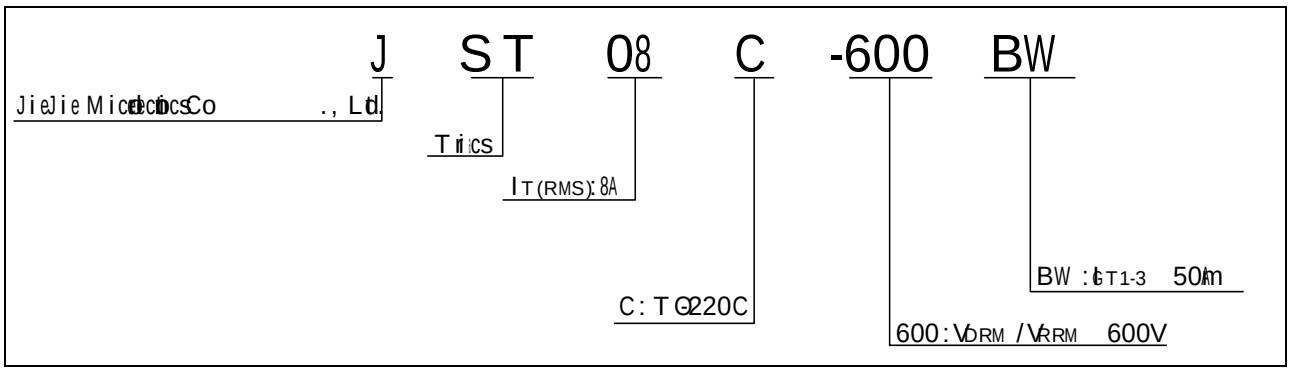
STATIC CHARACTERISTICS

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	0.8	V
R_D	Dynamic resistance	T_j=125	44	
I_{DRM}	V_D=V_{DRM} V_R=V_{RRM}	T_j=25	5	A
I_{RRM}		T_j=125	0.25	mA

THERMAL RESISTANCES

Symbol	Parameter	Value	Unit
$R_{th(j-c)}$	Junction to case (AC)	1.5	/W
$R_{th(j-i)}$	Junction to ambient (AC)	60	/W

ORDERING INFORMATION



MARKING

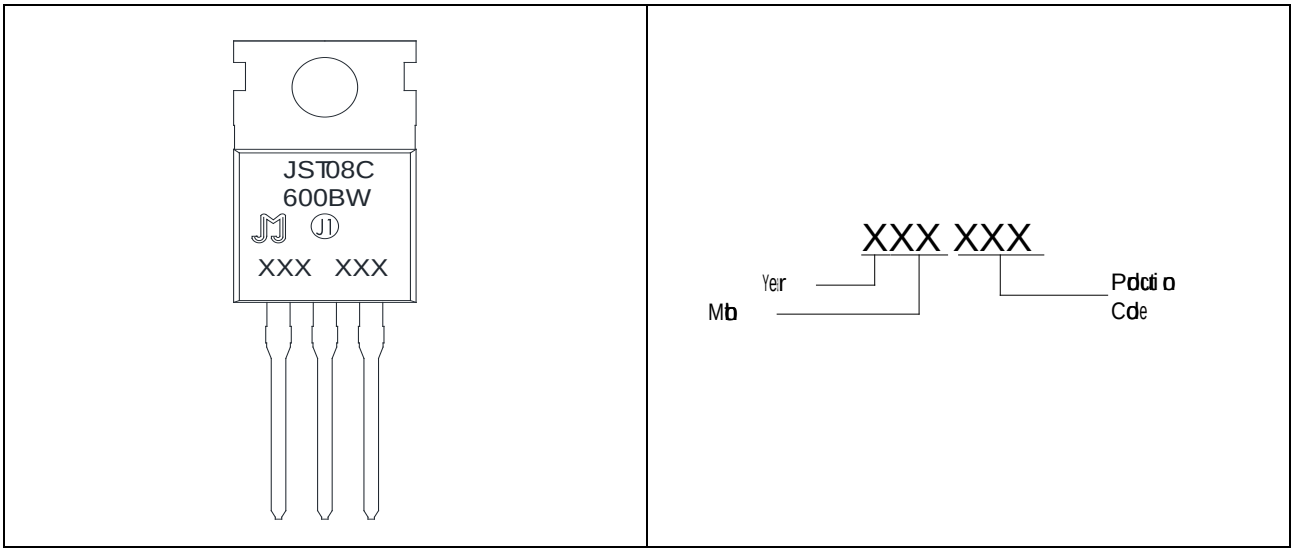


FIG.1: Maximum power dissipation vs RMS on-state current

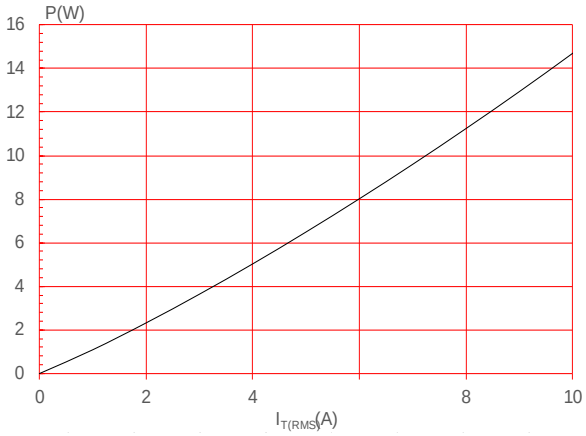


FIG.2: RMS on-state current vs case temperature

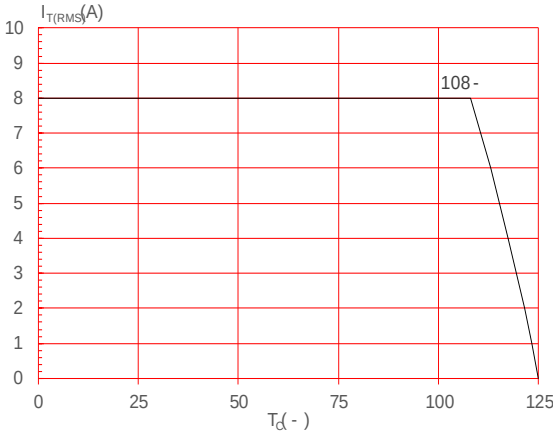


FIG.3: Surge peak on-state current vs number of cycles

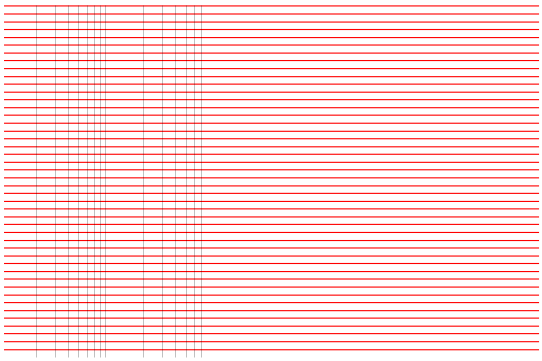
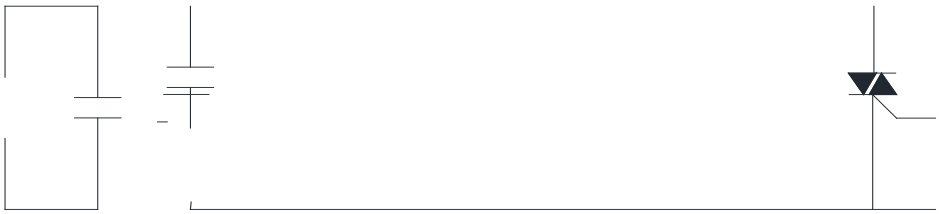


FIG.4: On-state characteristics

FIG.7 Test circuit for inductive load switching IEC-61000-4-5 surge



ORDERING INFORMATION

Order code	Voltage V_{DRM}/V_{RRM} (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
		H- I- J			
JST08C-600BW	600	50	TO-220C	50	Tube

Document Revision History

Date	Revision	Changes
Apr. 11, 2023	A.1.0	Updated
Oct. 15, 2025	A.1.1	Updated

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