



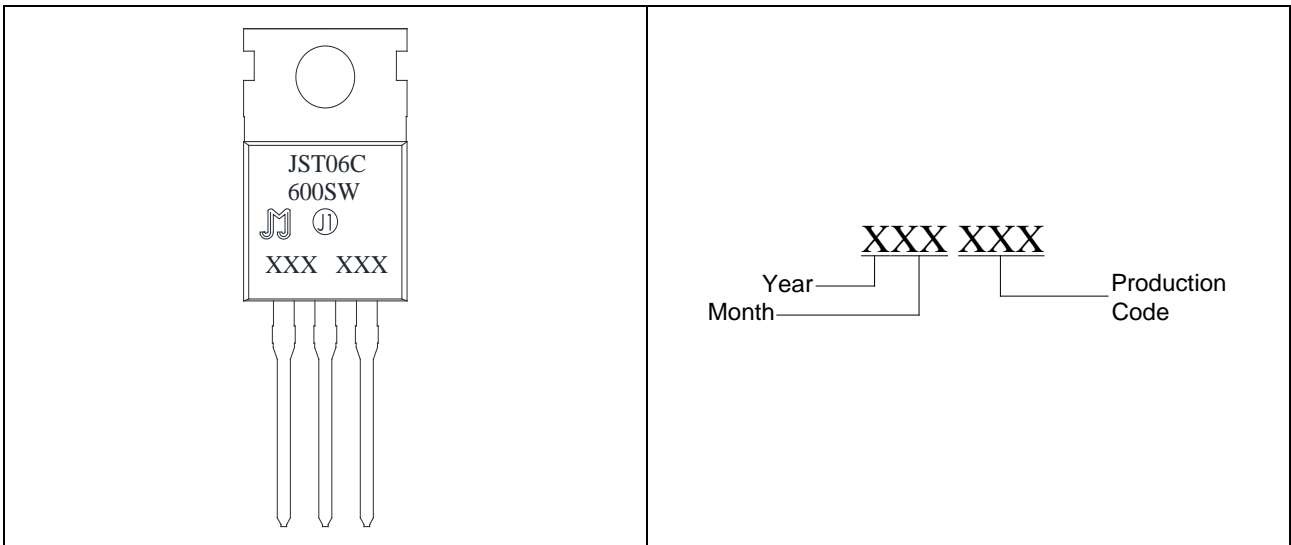
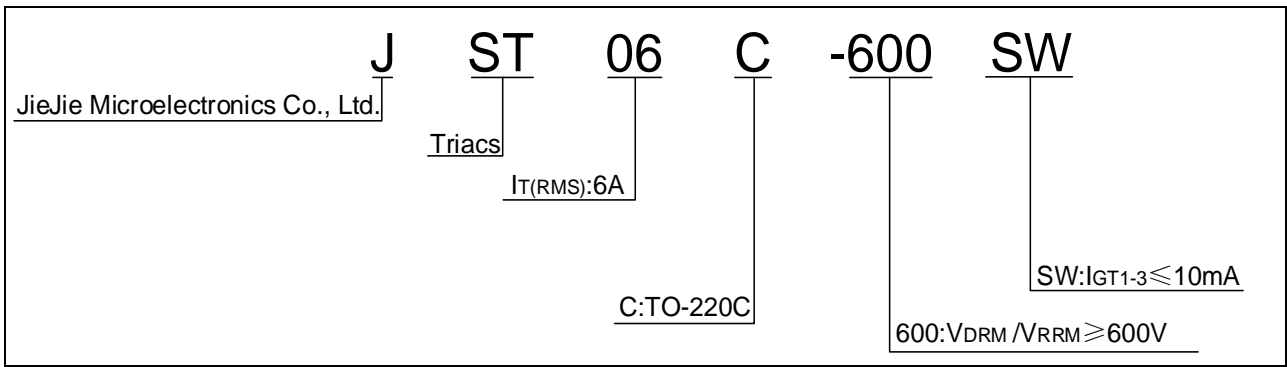
Peak gate power	$P_{GM}$	10	W
Peak pulse voltage ( $T_j=25^{\circ}C$ ; non-repetitive, off-state; FIG.7)	$V_{pp}$	3	kV

( $T_j=25^{\circ}C$  unless otherwise specified)

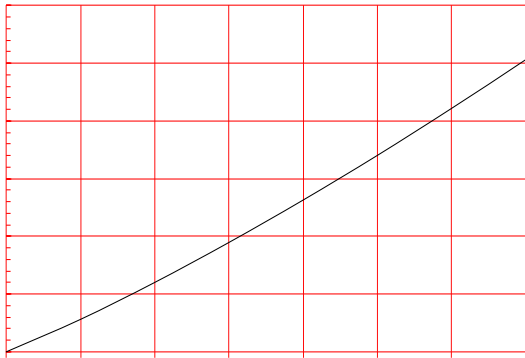
Symbol	Test Condition	Quadrant	Value		Unit
$I_{GT}$	$V_D=12V R_L=33$	I - II - III	MAX.	10	mA
$V_{GT}$		I - II - III	MAX.	1	V
$V_{GD}$	$V_D=V_{DRM} T_j=125^{\circ}C$ $R_L=3.3K$	I - II - III	MIN.	0.2	V
$I_L$	$I_G=1.2I_{GT}$	I - III	MAX.	15	mA
		II		25	
$I_H$	$I_T=100mA$		MAX.	15	mA
$dV/dt$	$V_D=400V$ Gate Open $T_j=125^{\circ}C$		MIN.	300	V s
$(dI/dt)_c$	$(dV/dt)_c=1$ $T_j=125^{\circ}C$		MIN.	1	A/ms
$t_{on}$	$I_G=20mA I_A=200mA I_R=20mA$ $T_j=25^{\circ}C$		TYP.	2.5	s
$t_{off}$				25	

Symbol	Parameter		Value(MAX.)	Unit
$V_{TM}$	$I_{TM}=8.5A t_p=380 s$	$T_j=25^{\circ}C$	1.5	V
$V_{TO}$	Threshold voltage	$T_j=125^{\circ}C$	0.82	V
$R_D$	Dynamic resistance	$T_j=125^{\circ}C$	57	m
$I_{DRM}$	$V_D=V_{DRM} V_R=V_{RRM}$	$T_j=25^{\circ}C$	5	A
$I_{RRM}$		$T_j=125^{\circ}C$	0.2	mA

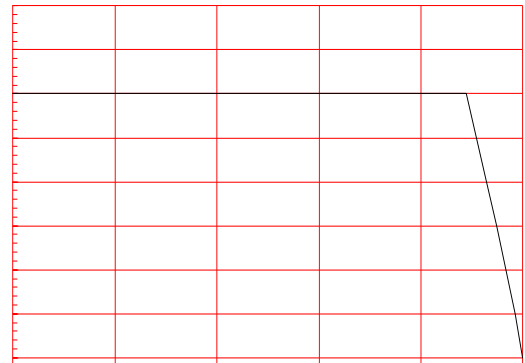
Symbol	Parameter	Value	Unit
$R_{th(j-c)}$	junction to case (AC)	1.7	$^{\circ}C/W$
$R_{th(j-a)}$	junction to ambient (AC)	60	$^{\circ}C/W$



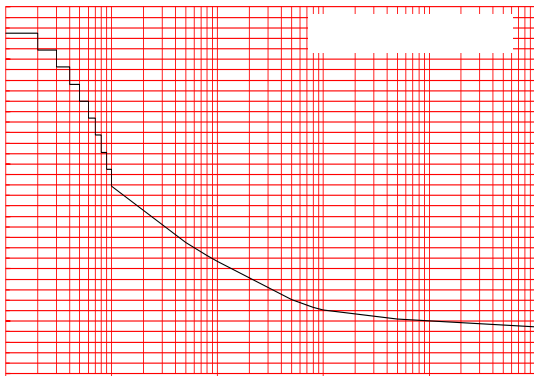
**FIG.1** Maximum power dissipation versus RMS on-state current



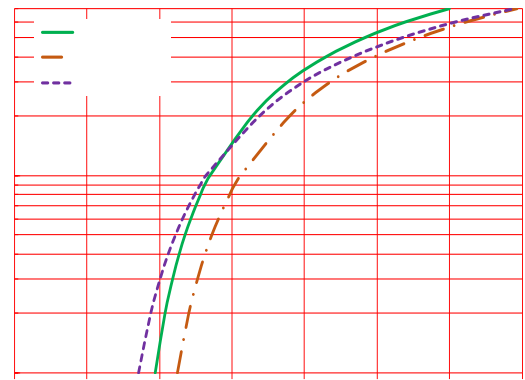
**FIG.2:** RMS on-state current versus case temperature



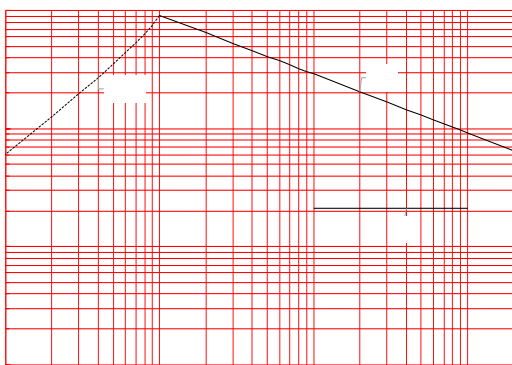
**FIG.3:** Surge peak on-state current versus number of cycles



**FIG.4:** On-state characteristics

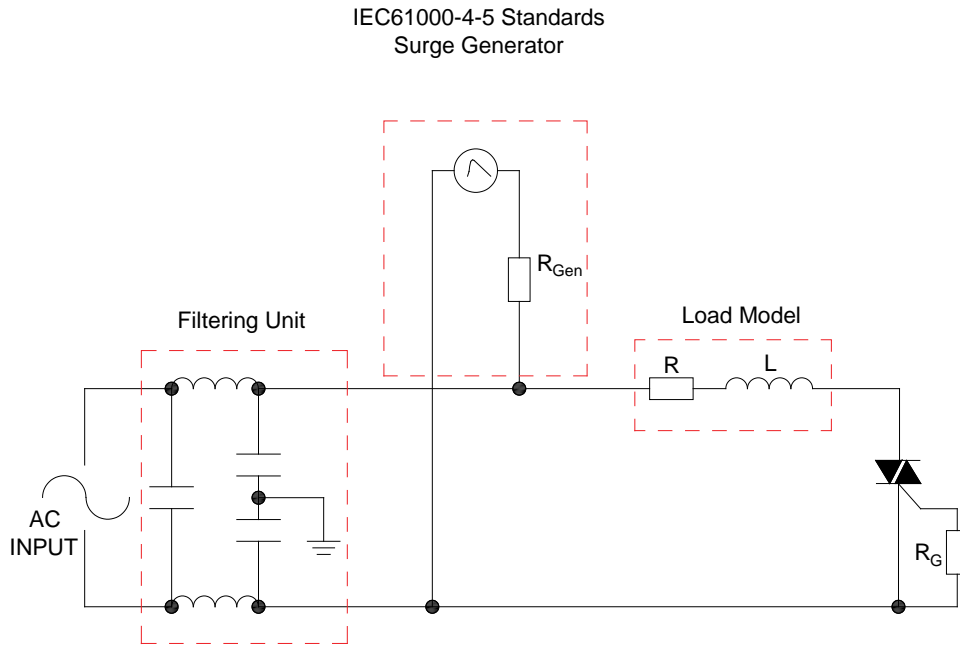


**FIG.5:** Non-repetitive surge peak on-state current for a sinusoidal pulse with width  $t_p < 20\text{ms}$ , and corresponding value of  $I^2t$  ( $di/dt < 5$ )



**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



Refer to 《Instructions for installation of plastic-sealed in-line power devices》 released by JieJie

Order code	Voltage $V_{DRM}/V_{RRM}$ (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
		- -			
JST06C-600SW	600	10	TO-220C	50	Tube

**Document Revision History**

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

