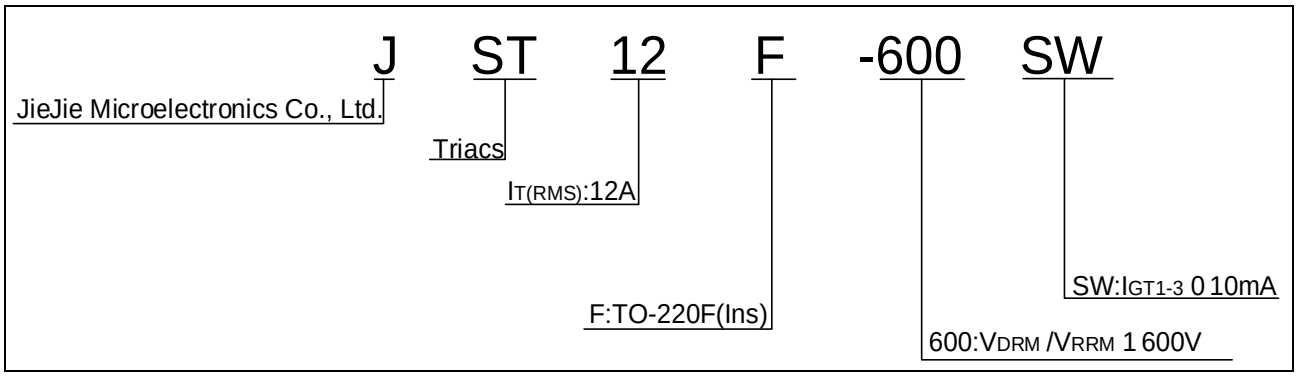
The JST12F-600SW triac is suitable for general purpose AC switching. It can be used as an ON/OFF function in applications such as heating regulation, induction motor starting circuits, for phase control operation in light dimmers, motor speed controllers. JST12F-600SW snubberless triac is especially recommended for use on inductive loads. It can be driven directly through the MCU I/O port. By using an external plastic package, JST12F-600SW provides a rated insulation voltage of 2000 VRMS, complying with UL standards (File ref: E252906). Package TO-220F is RoHS compliant.

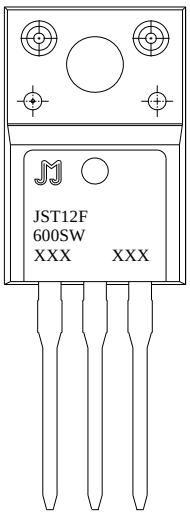
Storage junction temperature range	T_{stg}	-40-150	
Operating junction temperature range	T_j	-40-125	

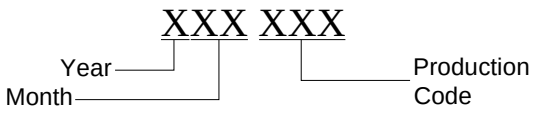
Average gate power dissipation (T_j=125)	$P_{G(AV)}$	0.5	W
Peak gate power	P_{GM}	10	W
Peak pulse voltage (T_j=25 ; non-repetitive,off-state;FIG.7)	V_{pp}	4	kV

(T_j=25 unless otherwise specified)

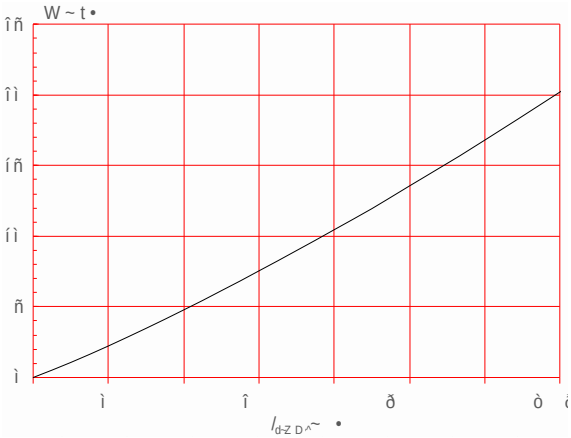
I_{GT}	V_D =12V R_L =33Ω	- -	MAX.	10	mA
V_{GT}		- -	MAX.	1	V
V_{GD}	V_D =V_{DRM} T_j =125 R_L =3.3kΩ	- -	MIN.	0.2	V
I_L	I_G =1.2I_{GT}	-	MAX.	25	mA
				30	
I_H	I_T =500mA		MAX.	15	mA
dV/dt	V_D=400V Gate Open T_j =125		MIN.	500	V/μs
(dI/dt)c	(dV/dt)c=10V/μs T_j=125		M IN.	3	A/ms
t_{on}	I_G=20mA I_A=200mA I_R=20mA T= ȯ 20mA Ȯ T A				


J ST 12 F -600 SW
JieJie Microelectronics Co., Ltd.
Triacs
IT(RMS):12A
F:TO-220F(Ins)
600:VDRM /VRRM 1 600V
SW:IGT1-3 0 10mA


JST12F
600SW
XXX XXX


XXX XXX
Year
Month
Production
Code

Maximum power dissipation versus RMS on-state current



RMS on-state current versus case temperature

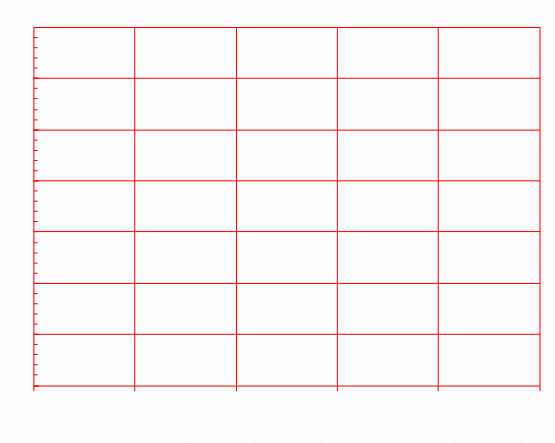
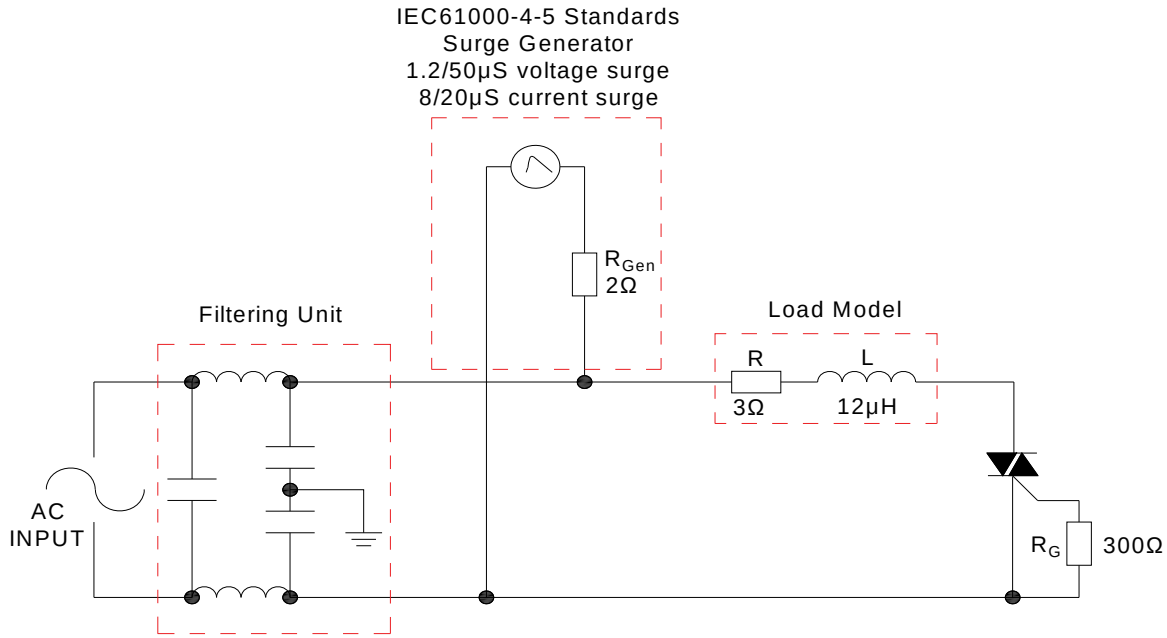


FIG.7 ÖTest circuit for inductive and resistive loads to IEC-61000-4-5 standards



Refer to the application note “Assembly Instructions for Thyristors in Through-hole Package” released by JieJie D] Œ } o š Œ } v] • X

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