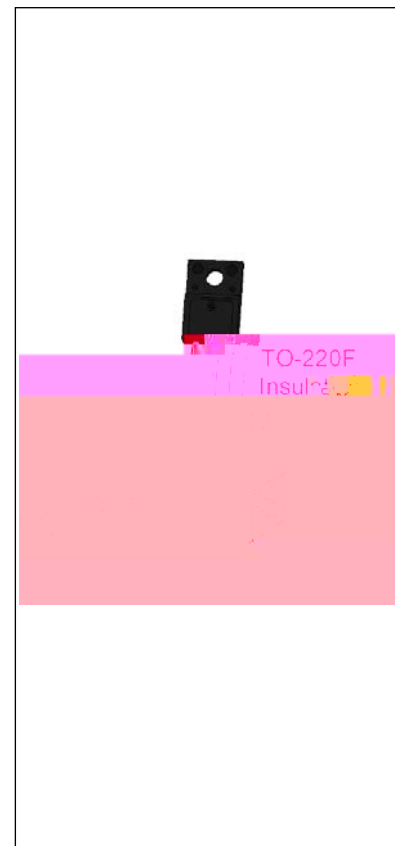


The JST30F-1200BW triac is suitable for general purpose AC switching. It can be used as an ON/OFF function in applications such as heating regulation, induction motor starting circuits, for phase control operation in light dimmers, motor speed controllers. JST30F-1200BW snubberless triac is especially recommended for use on inductive loads. By using an external plastic package, JST30F-1200BW provides a rated insulation voltage of 2000 VRMS, complying with UL standards (File ref: E252906). Package TO-220F is RoHS compliant.



Symbol	Value	Unit
$I_{T(RMS)}$	30	A
V_{DRM}/V_{RRM}	1200	V
$I_{GT} / /$	50/50/50	mA

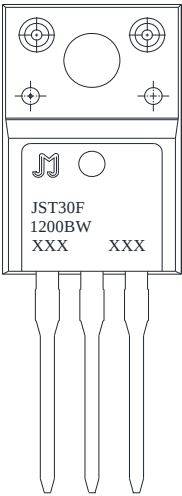
Storage junction temperature range	T_{stg}	-40-150	
Operating junction temperature range	T_j	-40-125	
Repetitive peak off-state voltage ($T_j=25^\circ\text{C}$)	V_{DRM}	1200	V
Repetitive peak reverse voltage ($T_j=25^\circ\text{C}$)	V_{RRM}	1200	V
RMS on-state current ($T_c \leq 71^\circ\text{C}$)	$I_{T(RMS)}$	30	A
Non repetitive surge peak on-state current (full cycle, $t_p=20\text{ms}$, $T_j=25^\circ\text{C}$)	I_{TSM}	300	A
Non repetitive surge peak on-state current (full cycle, $t_p=16.6\text{ms}$, $T_j=25^\circ\text{C}$)		330	
I^2t value for fusing ($t_p=10\text{ms}$, $T_j=25^\circ\text{C}$)	I^2t	450	A^2s
Critical rate of rise of on-state current ($I_G=2 \times I_{GT}$, $f=100\text{Hz}$, $T_j=125^\circ\text{C}$)	di/dt	100	$\text{A}/\mu\text{s}$
Peak gate current ($t_p=20\mu\text{s}$, $T_j=125^\circ\text{C}$)	I_{GM}	4	A



Average gate power dissipation ($T_j=125^\circ\text{C}$)	$P_{G(AV)}$	0.5	W
Peak gate power	P_{GM}	10	W
Peak pulse voltage ($T_j=25^\circ\text{C}$; non-repetitive, of $\leq 10\mu\text{s}$)			

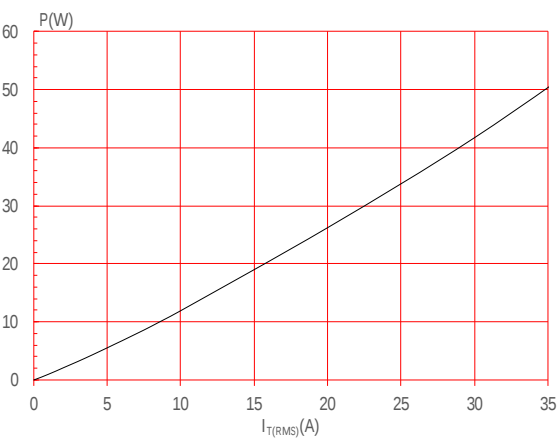


<u>J</u>	<u>ST</u>	<u>30</u>	<u>F</u>	<u>-1200</u>	<u>BW</u>
JieJie Microelectronics Co., Ltd.	Triacs	$I_{T(RMS)}: 30A$	$F: TO-220F(Ins)$	$1200: V_{DRM} / V_{RRM} \geq 1200V$	$BW: I_{GT1-3} \leq 50mA$

	<u>XXX</u> <u>XXX</u> Year _____ Month _____ Production Code
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Maximum power dissipation versus RMS
on-state current



RMS on-state current versus case
temperature

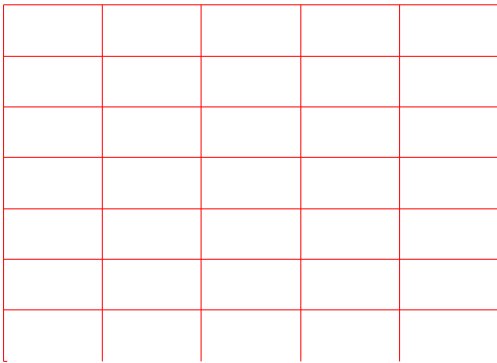
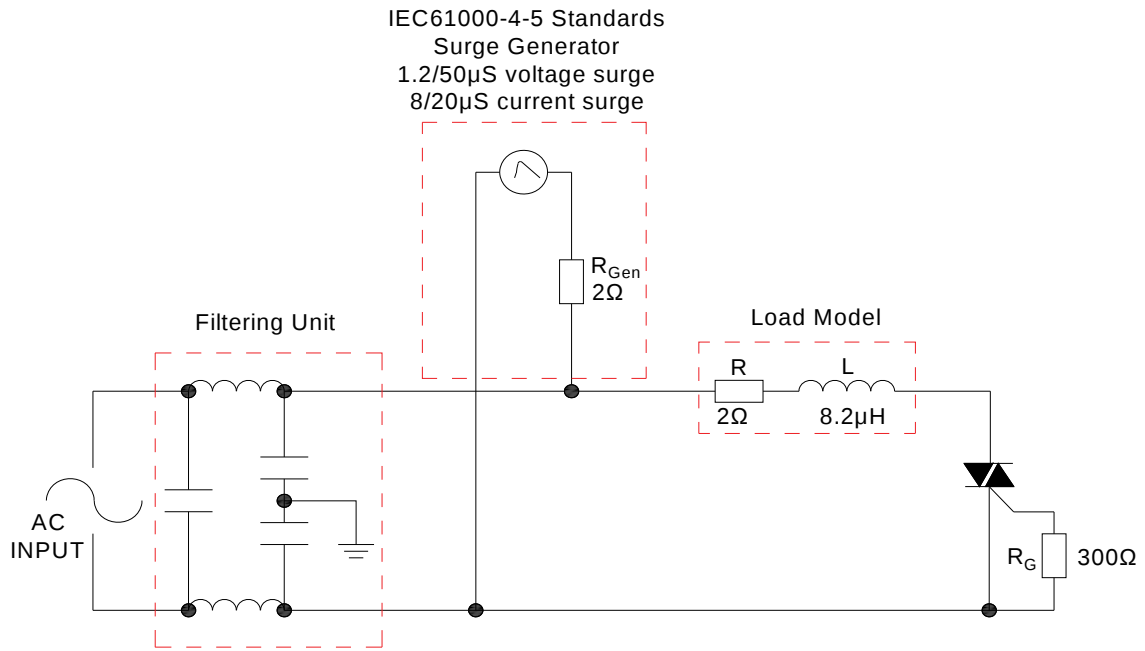


FIG.7 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards



Refer to the application note “Assembly Instructions for Thyristors in Through-hole Package” released by JieJie Microelectronics.





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