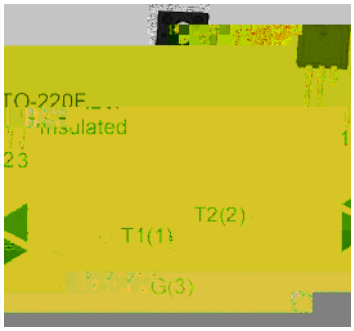
JST16X-1000CW 16A TRIAC

Rev.A.1.1

DESCRIPTION:

The JST16X-1000CW triac is suitable for general purpose AC switching. It is more suitable for the switch functions of washing machines' water valve, positive inversion of motor, heat pump...JST16X-1000CW snubberless triac is especially recommended for use on inductive loads. By using an external plastic package, JST16X-1000CW provides a rated insulation voltage of 2000 VRMS, complying with UL standards (File ref: E252906). Package TO-220F is RoHS compliant.



MAIN FEATURES

Symbol	Value	Unit
$I_{T(RMS)}$	16	A
V_{DRM} /V_{RRM}	1000	V
I_{GT} / /	35/35/35	mA

ABSOLUTE MAXIMUM RATINGS

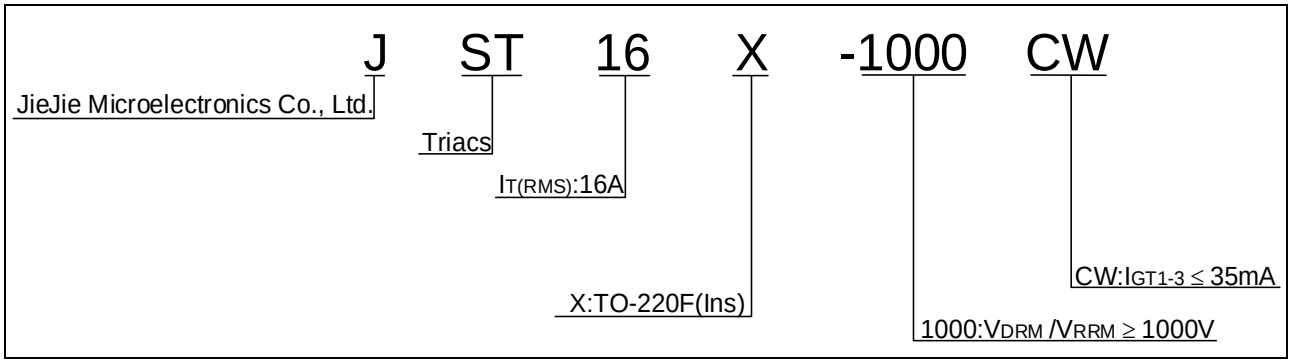
Parameter	Symbol	Value	Unit
Storage junction temperature range	T_{stg}	-40-150	
Operating junction temperature range	T_j	-40-125	
Repetitive peak off-state voltage (T_j=25)	V_{DRM}	1000	V
Repetitive peak reverse voltage (T_j=25)	V_{RRM}	1000	V
RMS on-state current ($T_C \leq$ 75)	$I_{T(RMS)}$	16	A
Non repetitive surge peak on-state current (full cycle , t_p=20ms , T_j=25)	I_{TSM}	170	A
Non repetitive surge peak on-state current (full cycle , t_p=16.6ms , T_j=25)		180	
I^2t value for fusing (t_p=10ms , T_j=25)	I^2t	145	A^2s
Critical rate of rise of on-state current (I_G=2 × I_{GT} , f=100Hz , T_j=125)	dI/dt	100	A/μs
Peak gate current (t_p=20μs , T_j=125)	I_{GM}	4	A
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

ELECTRICAL CHARACTERISTICS (T_j=25 unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	V_D =12V R_L =33Ω	- -	MAX.	35	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.	50	mA
				60	
[redacted]H	I_T =500mA		MAX.	40	mA
[redacted]/dt	V_D=670V Gate Open T_j =125		MIN.	1000	V/μs
[redacted]dt)c	(dV/dt)c=20V/μs T_j=125		MIN.	12	A/ms
[redacted]on	I_G=40mA I_A				

ORDERING INFORMATION



MARKING

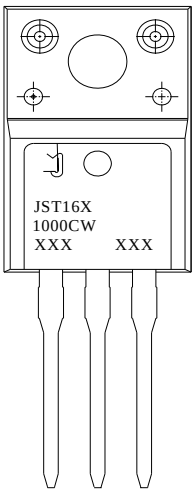
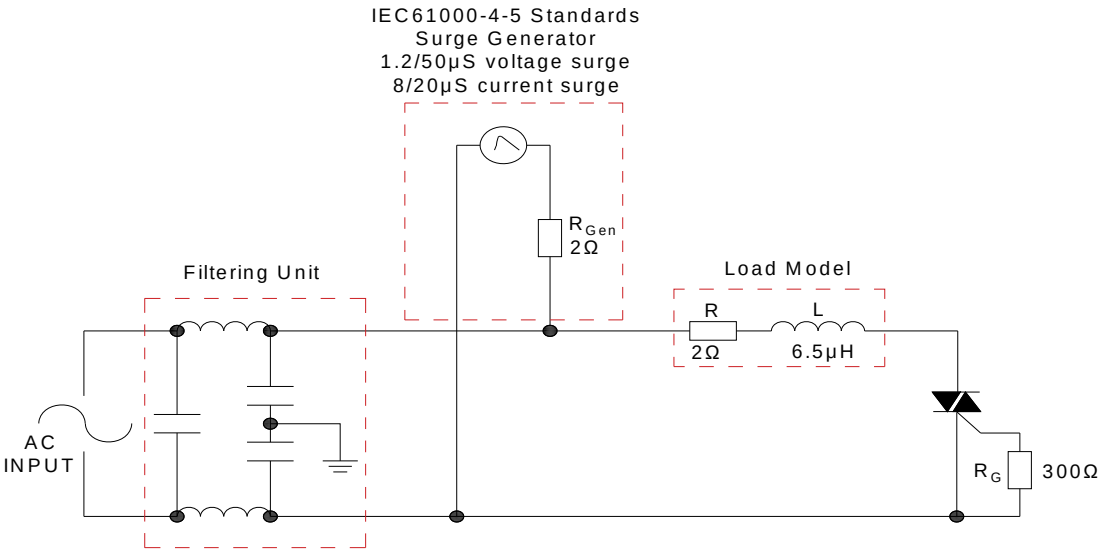


FIG.7 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards



LEAD FORMING AND SOLDERING

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

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