



DESCRIPTION:

The JST16F-1200TW 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. JST16F-1200TW 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, JST16F-1200TW provides a rated insulation voltage of 2000 VRMS, complying with UL standards (File ref: E252906). Package TO-220F is RoHS compliant.

MAIN FEATURES

i g



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}	3	kV

ELECTRICAL CHARACTERISTICS ($T_j=25$ unless otherwise specified)

I_{GT}	$V_D=12V R_L=33$	-	-	MAX.	5	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.	15	mA
		-	-		20	
I_H	$I_T=500mA$	-	-	MAX.	15	mA
dV/dt	$V_D=800V$ Gate Open $T_j=125$	-	-	MIN.	20	V/ μs
$(dI/dt)_c$	$(dV/dt)_c=10V/\mu s T_j=125$	-	-	MIN.	1.5	A/ms
t_{on}	$I_G=10mA I_A=200mA I_R=20mA$ $T_j=25$	-	-	TYP.	3	μs
t_{off}		-	-		25	

STATIC CHARACTERISTICS

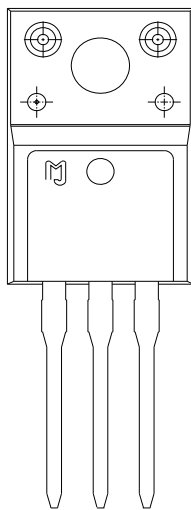
V_{TM}	$I_{TM}=22.5A t_p=380\mu s$	$T_j=25$	1.5	V
V_{TO}	Threshold voltage	$T_j=125$	0.77	V



ORDERING INFORMATION

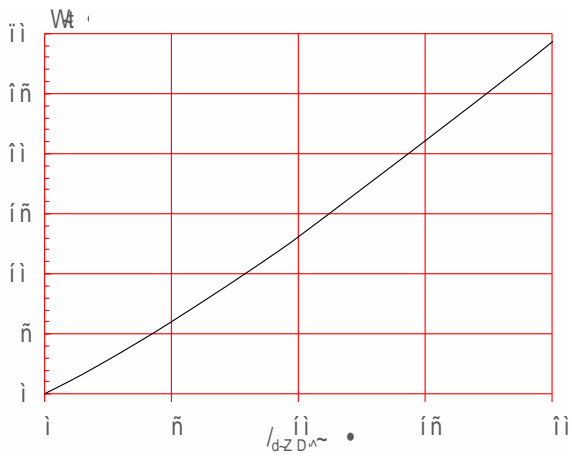
<u>J</u>	<u>ST</u>	<u>16</u>	<u>F</u>	<u>-1200</u>	<u>TW</u>
JieJie Microelectronics Co., Ltd.	Triacs	$I_{T(RMS)}:16A$			
		F:TO-220F(Ins)			TW:IGT1-3 0.5mA
				1200:VDRM /VRRM 1 1200V	

MARKING





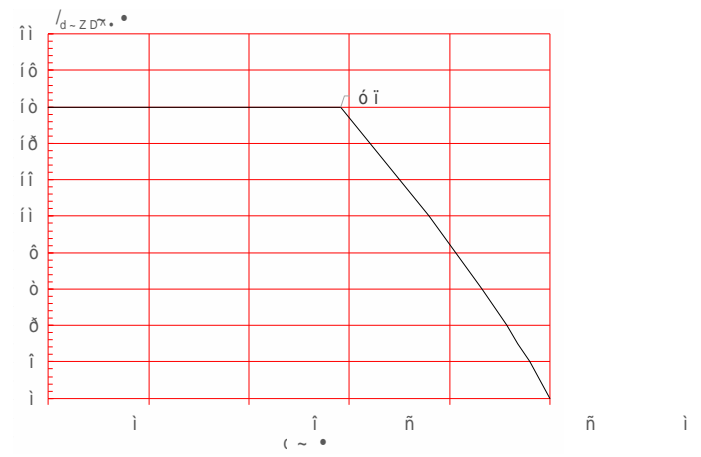
Maximum power dissipation versus RMS on-state current



Surge peak on-state current versus number of cycles



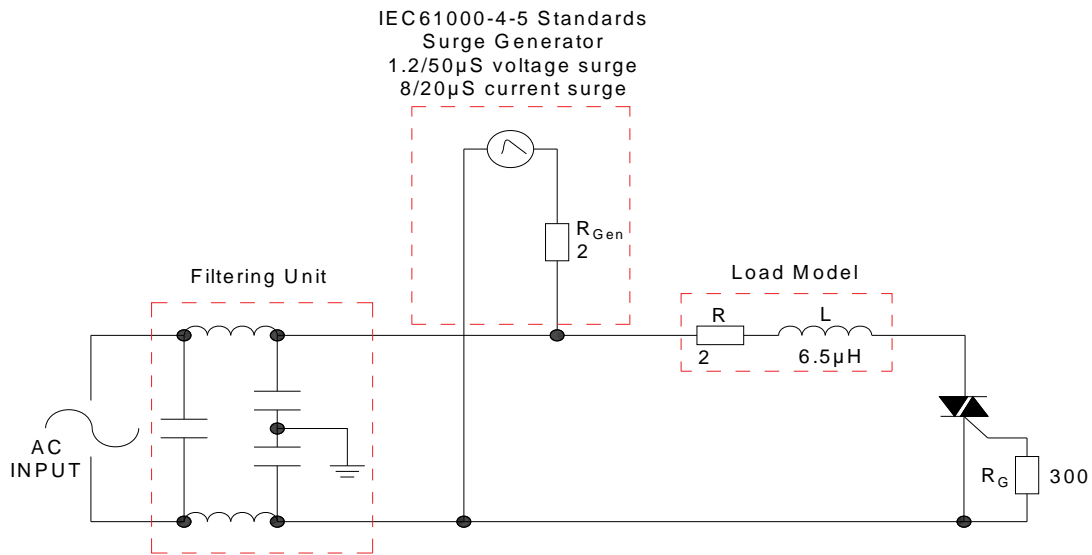
RMS on-state current versus case temperature



On-state characteristics



FIG.7 ÖTest 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 D] œ} o š œ} v] •X



ORDERING INFORMATION

Date	Revision	Changes
Apr.12, 2023	A.1.0	Last updated
Oct.13, 2025	A.1.1	Revise PACKAGE MECHANICAL DATA



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