DESCRIPTION:

The JST12F-1200SW 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-1200SW 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-1200SW provides a rated insulation voltage of 2000 VRMS, complying with UL standards (File ref: E252906). Package TO-220F is RoHS compliant..

MAIN FEATURES

ABSOLUTE MAXIMUM RATINGS

Storage junction temperature range	T_{stg}	-40-150	M ố à "

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)

I_{GT}	V_D =12V R_L =33Ω	- -	MAX.	10	mA
V_{GT}		- -	MAX.	1	V
	V_D =V_{DRM} T_j =125	-	MIN.	0.2	V
		-	MAX.	25	mA
				30	
			MAX.	15	mA
		5	MIN.	100	V/μs
			MIN.	3	A/ms
		A	TYP.	2.5	μs
				25	

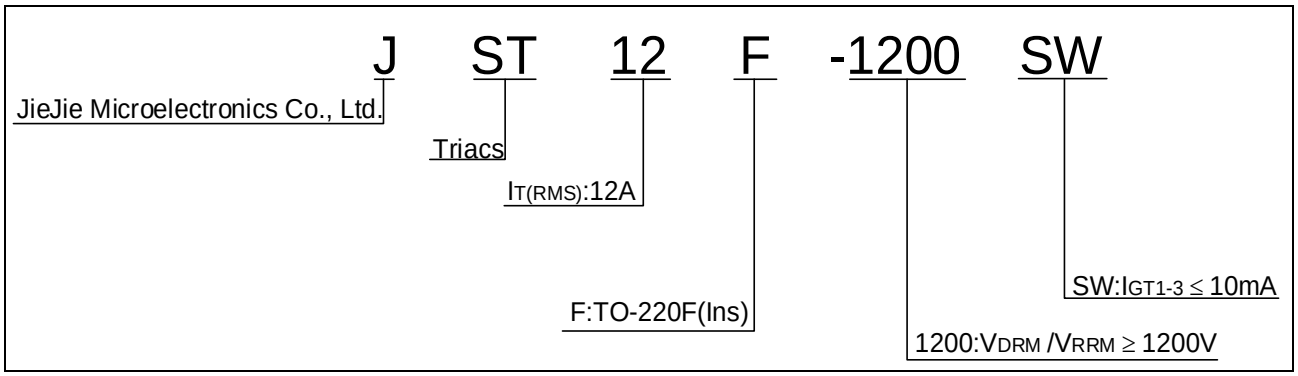
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V_{TM}	I_{TM} =17A t_p=380μs	T_j=25	1.5	V
V_{TO}	Threshold voltage	T_j=125	0.78	V
R_D	Dynamic resistance	T_j=125	37	mΩ
I_{DRM}	V_D =V_{DRM} V_R =V_{RRM}	T_j=25	10	μA
I_{RRM}		T_j=125	2	mA

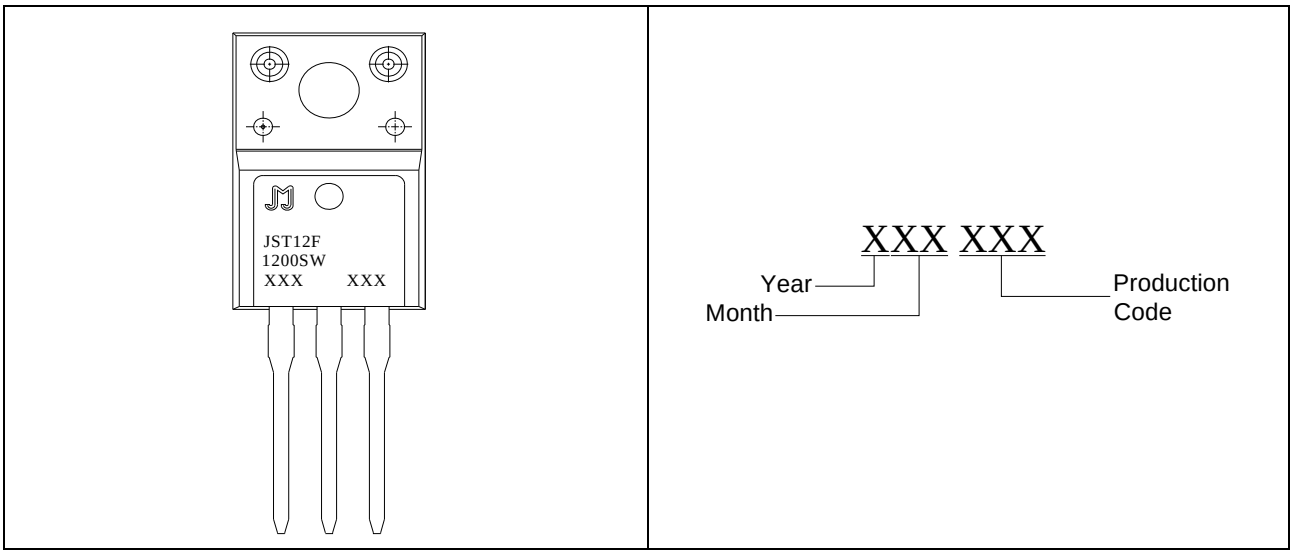
THERMAL RESISTANCES

$R_{th(j-c)}$	junction to case (AC)	2.4	/W
$R_{th(j-a)}$	junction to ambient (AC)	60	/W

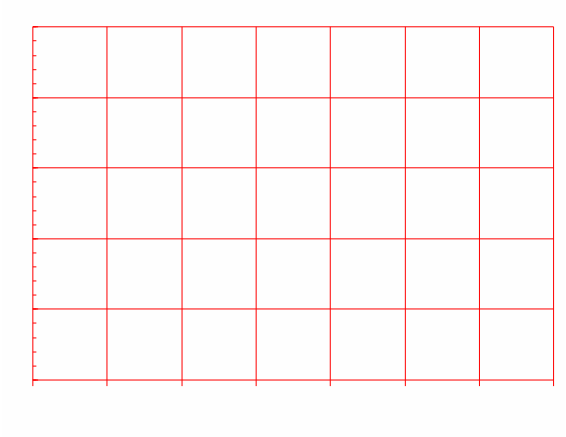
ORDERING INFORMATION



MARKING

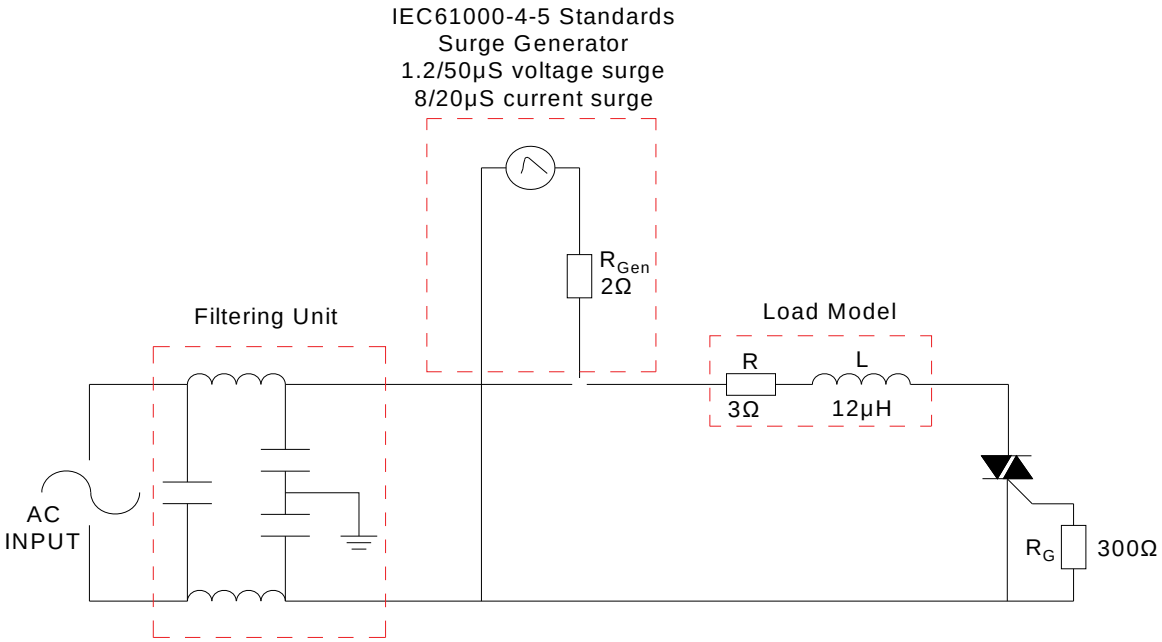


Maximum power dissipation versus RMS on-state current



RMS on-state current versus case temperature

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



PACKAGE MECHANICAL DATA



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