JST24F-1600BW 25A TRIAC

Rev.A.1.1

The JST24F-1600BW 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. JST24F-1600BW snubberless triac is especially recommended for use on inductive loads. By using an external plastic package, JST24F-1600BW provides a rated insulation voltage of 2000 VRMS, complying with UL standards (File ref: E252906). Package TO-220F is RoHS compliant.

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}	1600	V

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}	2.5	kV

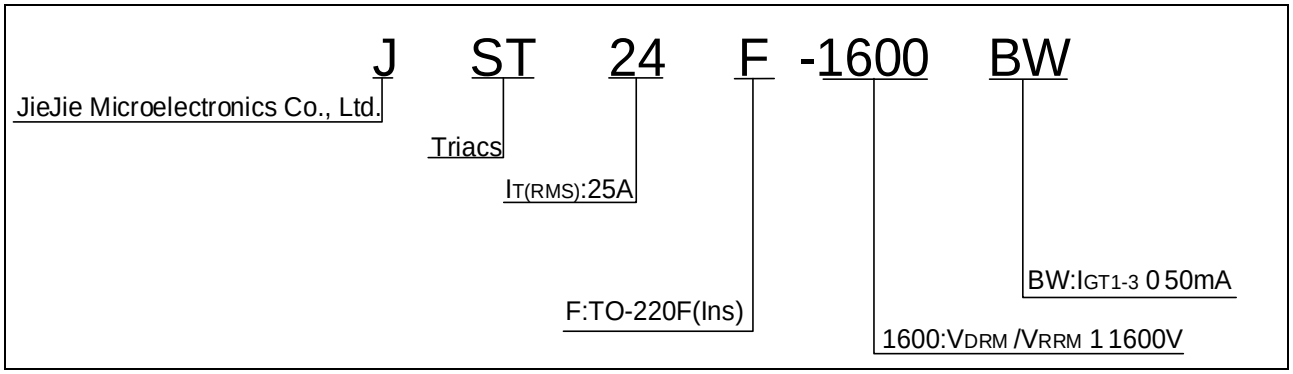
(T_j=25 unless otherwise specified)

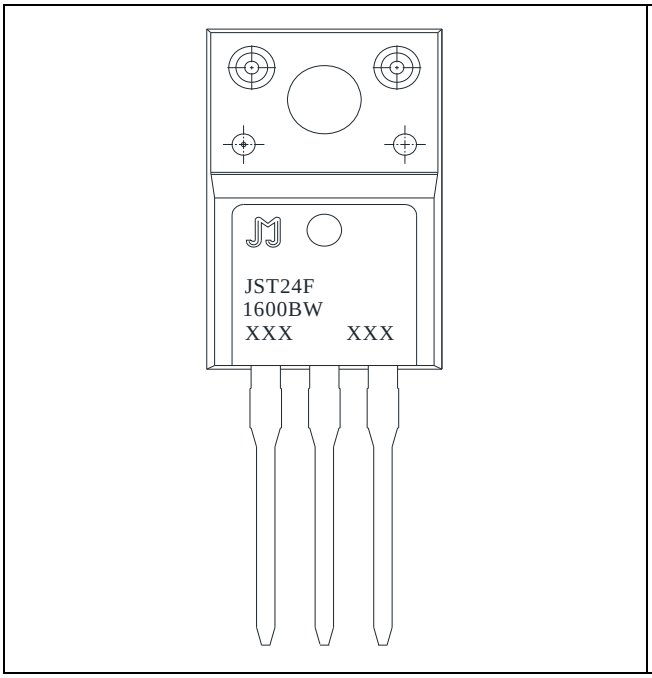
Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	V_D =12V R_L =33Ω	- -	MAX.	50	mA
V_{GT}		- -	MAX.	1	V
V_{GD}	V_D =V_{DRM} T_j=125 R_L =3.3kΩ	- -	MIN.	0.2	V
I_L	I_G=1.2I_{GT}	-	MAX.	90	mA
				100	
[redacted]			MAX.	80	mA
dV/dt	V_D=1070V Gate Open T_j=125		MIN.	2000	V/μs
(dI/dt)c	(dV/dt)c=20V/μs T_j=125		MIN.	25	A/ms
t_{on}	I_G=80mA I_A=400mA I_R=40mA T_j=25		TYP.	3	μs
t_{off}				80	

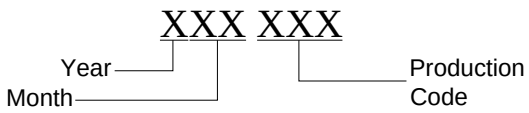
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Symbol	Parameter		Value(MAX.)	Unit
V_{TM}	I_{TM} =35A t_p=380μs	T_j=25	1 .8	V
V_{TO}	Threshold voltage	T_j=125	0.77	V
R_D	Dynamic resistance	T_j=125	35	mΩ
I_{DRM}	V_D=$V_{DRM}$$V_R$ =V_{RRM}	T_j=25	20	μA
I_{RRM}		T_j=125	8	mA

[redacted]


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F
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BW
JieJie Microelectronics Co., Ltd.
Triacs
IT(RMS):25A
F:TO-220F(Ins)
1600:VDRM /VRRM 1 1600V
BW:IGT1-3 0 50mA


JST24F
1600BW
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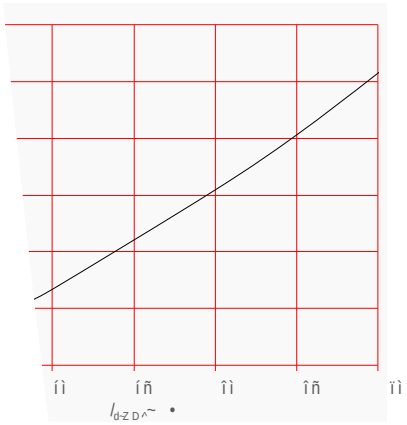


FIG.2: RMS on-state current versus case temperature

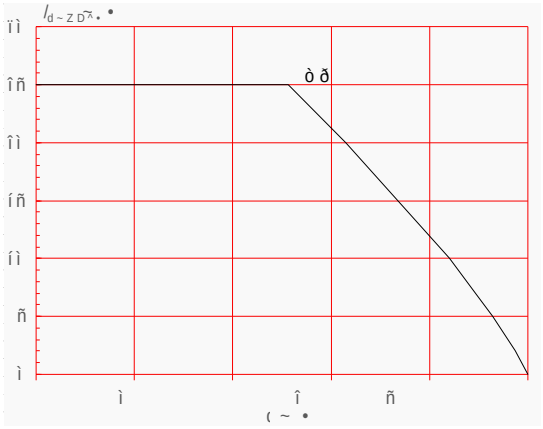
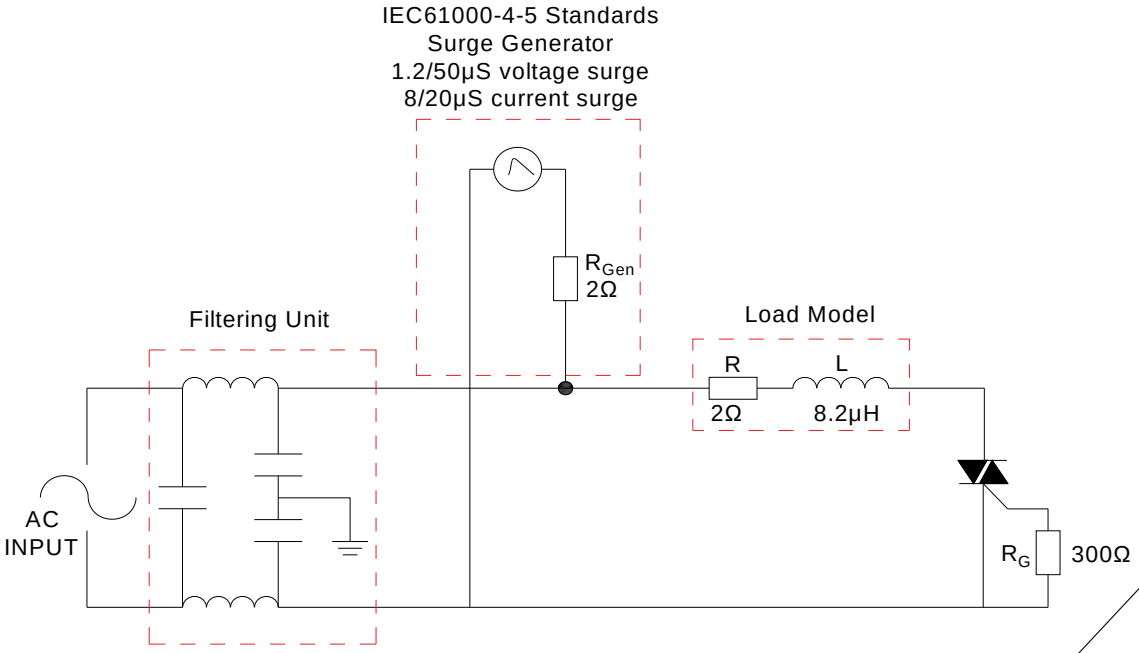
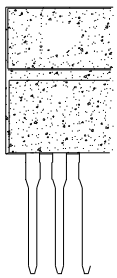


FIG.7 ÖTest circuit for inductive and resistive loads to IEC-61000-4-5 standards



Order code	Voltage V_{DRM}/V_{RRM}(V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode



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