JST30E-600BW 30A TRIAC

Rev.A.1.1

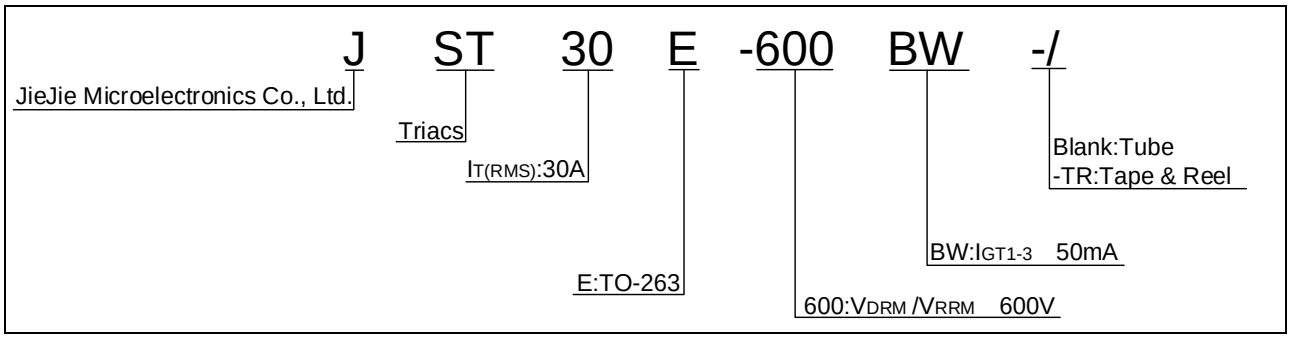
The JST30E-600BW triac is suitable for general purpose AC switching. It can be used as an ON/OFF function in applications such as heating regulation, induction motor starting circuits, for phase control operation in light dimmers, motor speed controllers. JST30E-600BW snubberless triac is especially recommended for use on inductive loads. Package TO-263 is RoHS compliant.

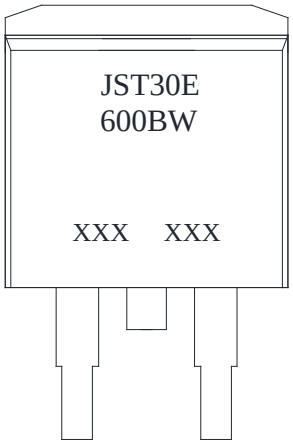
Parameter	Symbol	Value	Unit
Storage junction temperature range	T_{stg}	-40-150	
Operating junction temperature range	T_j	-40-125	
Repetitive peak off-state voltage (T_j=25)	V_{DRM}	600	V
Repetitive peak reverse voltage (T_j=25)	V_{RRM}	600	V
RMS on-state current (T_C 96)	$I_{T(RMS)}$	30	A
Non repetitive surge peak on-state current (full cycle , t_p=20ms , T_j=25)	I_{TSM}	300	A
Non repetitive surge peak on-state current (full cycle , t_p=16.6ms , T_j=25)		330	
I^2t value for fusing (t_p=10ms , T_j=25)	I^2t	450	A^2

Peak pulse voltage (T_j=25 ; non-repetitive,off-state;FIG.8)	V_{pp}	2.5	kV

(T_j=25 unless otherwise specified)

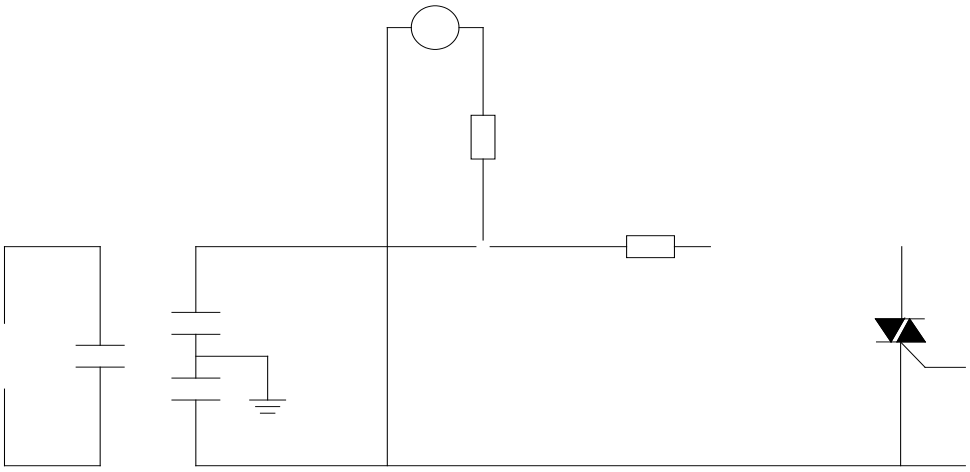
Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	V_D =12V R_L =33Ω	- -	MAX.	50	mA
V_{GT}		- -	MAX.	1.3	V
V_{GD}	V_D =V_{DRM} T_j =125 R_L =3.3kΩ	- -	MIN.	0.15	V
I_L	I_G =1.2I_{GT}	-	MAX.	80	mA
				100	
I_H	I_T =500mA		MAX.	75	mA
dV/dt	V_D=400V Gate Open T_j =125		MIN.	2500	V/μs
(dI/dt)c	(dV/dt)c=20V/μs T_j=125		MIN.	25	A/ms
t_{on}	I_G=80mA I_A=400mA I_R=40mA T_j=25				


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JieJie Microelectronics Co., Ltd.
Triacs
IT(RMS):30A
E:TO-263
600:VDRM /VRRM 600V
BW:IGT1-3 50mA
Blank:Tube
-TR:Tape & Reel


JST30E
600BW
XXX XXX

JST30E-600BW

FIG.8: Test 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
		H- I- J			
JST30E-600BW	600	50	TO-263	50	Tube
JST30E-600BW-TR				800	Tape & Reel

Document Revision History

Date	Revision	Changes
Apr.11, 2023	A.1.0	Last updated
Oct.20, 2025	A.1.1	Revise PACKAGE MECHANICAL DATA

JST30E-600BW **JieJie M**