DESCRIPTION:

The JST04W-600SW 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. JST04W-600SW snubberless triac is especially recommended for use on inductive loads. It can be driven directly through the MCU I/O port. Package SOT-223-2L is RoHS compliant.

MAIN FEATURES

ABSOLUTE MAXIMUM RATINGS

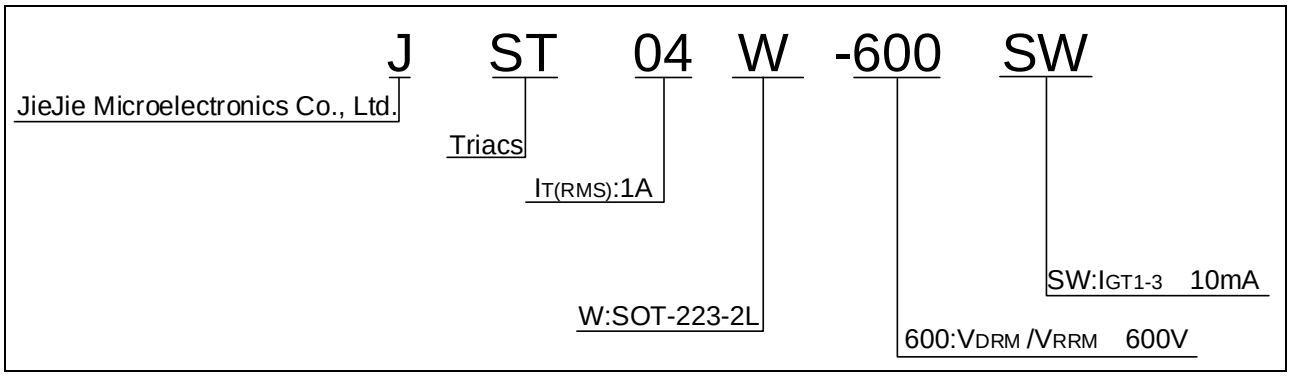
Storage junction temperature range	T_{stg}	-40-150	
Operating junction temperature range	T_j	-40-125	
Repetitive peak off-state voltage (T_j=25)	V_{DRM}	600	V
Repetitive peak reverse voltage (T_j=25)	V_{RRM}	600	V
RMS on-state current (T_C 102)	$I_{T(RMS)}$	1	A
Non repetitive surge peak on-state current (full cycle , t_p=20ms , T_j=25)	I_{TSM}	25	A
Non repetitive surge peak on-state current (full cycle , t_p=16.6ms , T_j=25)		27.5	
I^2t value for fusing (t_p=10ms , T_j=25)	I^2t	3.1	A^2s
Critical rate of rise of on-state current (I_G=2× I_{GT} , f=100Hz , T_j=125)	dI/dt	100	A s
Peak gate current (t_p=20 s , T_j=125)	I_{GM}	2	A
Average gate power dissipation (T_j=125)	$P_{G(AV)}$	0.1	W

Peak pulse voltage (T_j=25 ; non-repetitive,off-state;FIG.8)	V_{pp}	3	kV

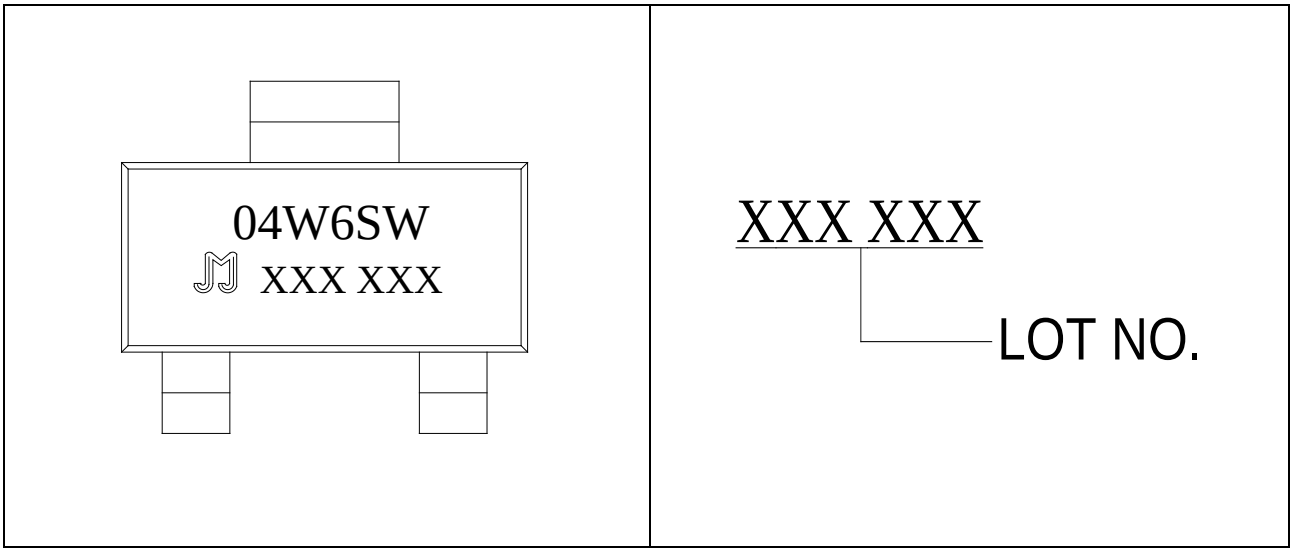
ELECTRICAL CHARACTERISTICS (T_j=25 unless otherwise specified)

[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
I_{GT}	V_D =12V R_L =33	- -	MAX.	10	mA
V_{GT}		- -	MAX.	1 1	

ORDERING INFORMATION



MARKING



: Maximum power dissipation versus RMS on-state current

RMS on-state current versus case temperature

F6 Relative variations of gate trigger current, holding current and latching current versus junction temperature

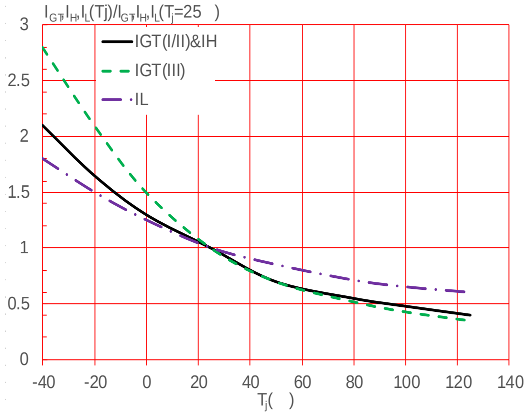


FIG.8 Test circuit for inductive and resistive loads to IEC-61000-4-5./7 ( )-13.0 (3e7 (Me16 (nc

ORDERING INFORMATION

007 Tw7ifac789/InlineShanathedMCID/2TT 0.2 qc -050603804 32w 0.559

DELIVERY MODE

Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
W						
E	D0( )Tj7.895 80 ie P2( )Tj 5.002 Tc -5Tc 0 Tc5-2.895 -2					

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