JST132L-600D 0.5A TRIAC

Rev.A.1.0

DESCRIPTION:

The JST132L-600D 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. Package SOT-23-3L is RoHS compliant.

MAIN FEATURES

ABSOLUTE MAXIMUM RATINGS

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 ($T_C \leq 74$)	$I_{T(RMS}$		

ELECTRICAL CHARACTERISTICS (T_j=25 unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	V_D=12V R_L=33Ω	- -	MAX.	5	mA
				10	
V_{GT}		ALL	MAX.	1.3	V
V_{GD}	V_D=V_{DRM} T_j=125 R_L=3.3kΩ	ALL	MIN.	0.2	V
I_L	I_G=1.2I_{GT}	- -	MAX.	10	mA
				20	
I_H	I_T=50mA		MAX.	10	mA
dV/dt	V_D=400V Gate Open T_j=110		MIN.	60	V/μs
(dV/dt)c	(dI/dt)c=0.3A/ms, T_j=110		MIN.	5	V/μs
t_{on}	I_G=20mA I_A=200mA I_R=20mA T_j=25		TYP.	2.5	μs
t_{off}				25	

STATIC CHARACTERISTICS

Symbol	Parameter		Value(MAX.)	Unit
V_{TM}	I_{TM}=0.85A t_p=380μs	T_j=25	1.5	V
V_{TO}	Threshold voltage	T_j=125	0.98	V
R_D	Dynamic resistance	T_j=125	362	mΩ

ORDERING INFORMATION

J ST 132 L -600 D

- J: JieJie Microelectronics Co., Ltd.
- ST: Triacs
- 132: $I_{T(RMS)}$:0.5A
- L: L:SOT-23-3L
- -600: 600:V_{DRM} /V_{RRM} ≥ 600V
- D: D:I_{GT1-3} ≤ 5mA I_{GT4} ≤ 10mA

MARKING

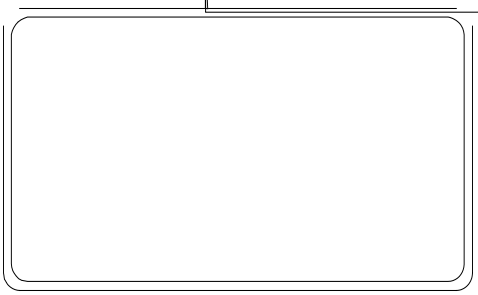
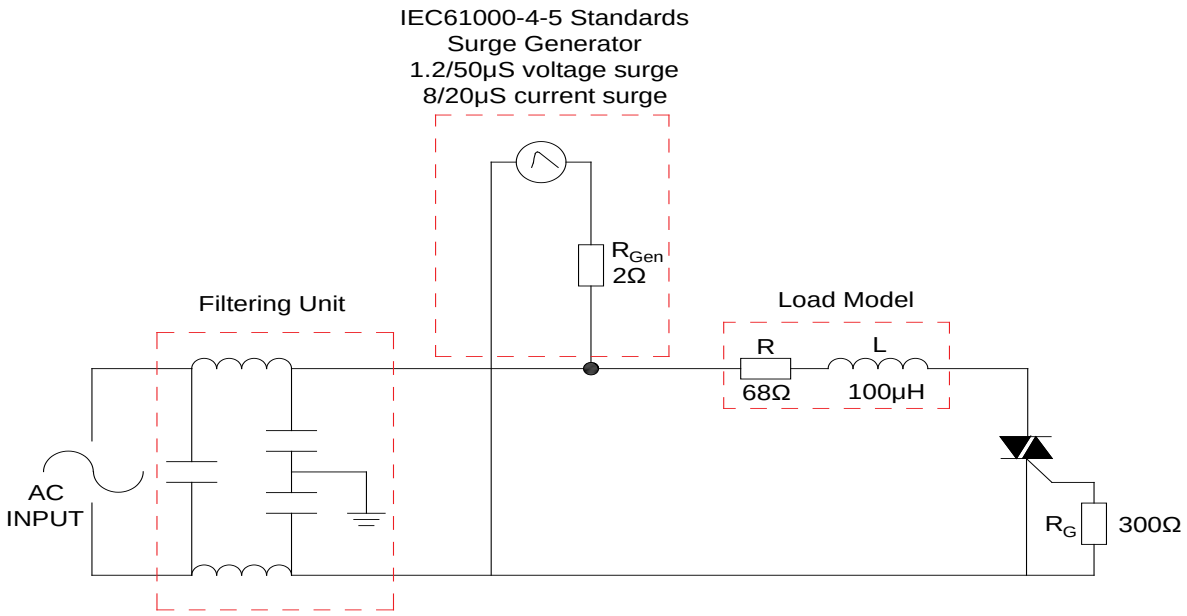


FIG.7: Relative variations of gate trigger current, holding current and latching current versus

FIG.8 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards



DELIVERY MODE