JST41T-1200BW 40A TRIAC

Rev.A.1.0

DESCRIPTION:

The JST41T-1200BW 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. JST41T-1200BW snubberless triac is especially recommended for use on inductive loads. By using a DBC, JST41T-1200BW provides a rated insulation voltage of 2500 VRMS, complying with UL standards (File ref: E252906). Package TG-C 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			

Peak gate power	P_{GM}	40	W
Peak pulse voltage (T_j=25 ; non-repetitive,off-state;FIG.7)	V_{pp}	2	kV

ELECTRICAL CHARACTERISTICS(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.	0.2	V
I_L	I_G=1.2I_{GT}	-	MAX.	80	mA
				200	
I_H	I_T =500mA		MAX.	100	mA
dV/dt	V_D=800V Gate Open T_j=125		MIN.	1500	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				

ORDERING INFORMATION

J	ST	41	T	-1200	BW
JieJie Microelectronics Co., Ltd.	Triacs	$I_{T(RMS)}$:40A	T:TG-C(Ins)	1200:V_{DRM} /V_{RRM} ≥ 1200V	BW:I_{GT1-3} ≤ 50mA

MARKING

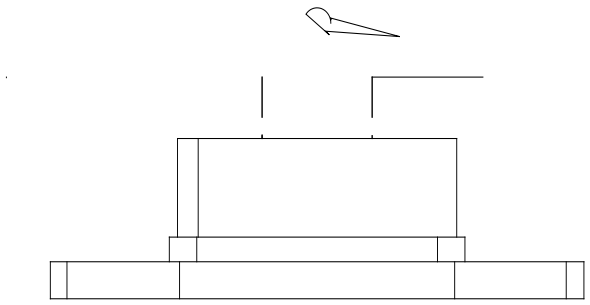
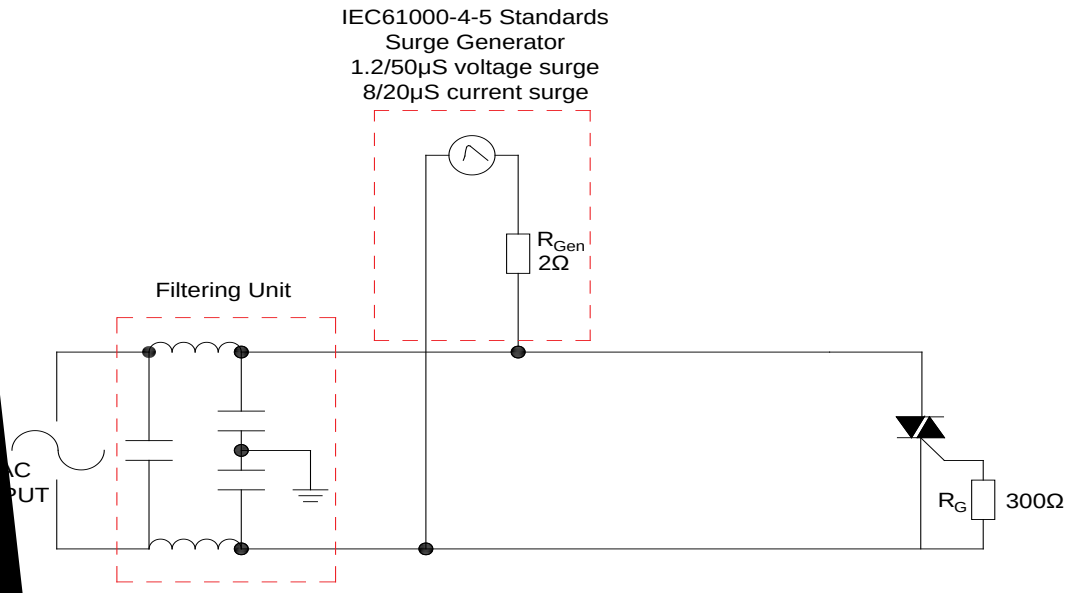


FIG.1: Maximum power dissipation versus RMS on-state current

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

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



ORDERING INFORMATION

Order code	Voltage V_{DRM}/V_{RRM}(V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
		- -			
JST41T-1200BW	1200	50	TG-C(Ins)	10	Tube

Document Revision History

Date	Revision	