



## 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

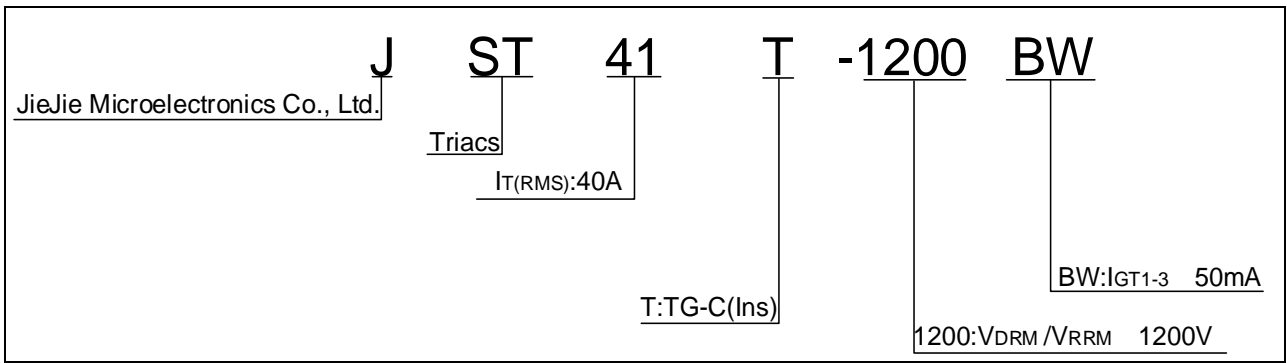
**ELECTRICAL CHARACTERISTICS**( $T_j=25$  unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
$I_{GT}$	$V_D=12V R_L=33$	- -	MAX.	50	mA
$V_{GT}$		- -	MAX.	1.3	V
$V_{GD}$	$V_D=V_{DRM} T_j=125$ $R_L=3.3k$	- -	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	$V/s$
$(dl/dt)_c$	$j=125$		MIN.	25	A/ms

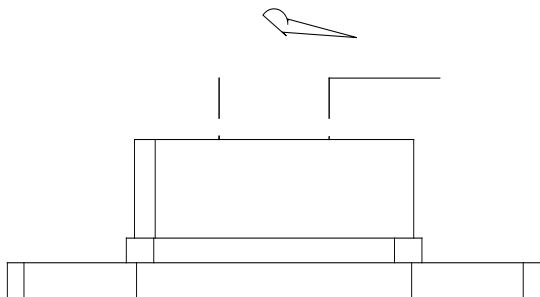
$t_{on}$   $I_G=80mA I_A=400mA I_R=40mA$

$T_j=27re f 5384692 T44 0 0 12 128.4515.28 0.481 0.481 re f 113.692 T382 >>BDC /$

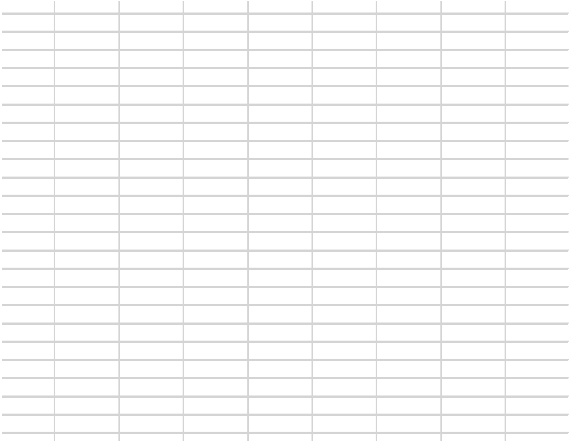
ORDERING INFORMATION



MARKING

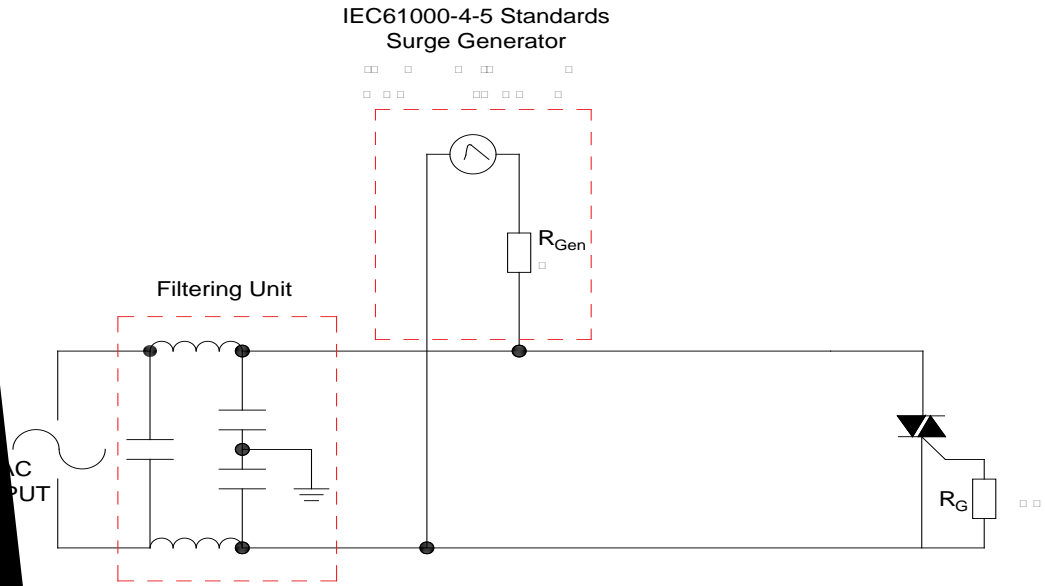


**FIG.1:** Maximum power dissipation versus RMS on-state current



**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
		- -			
<b>JST41T-1200BW</b>	<b>1200</b>	<b>50</b>	<b>TG-C(Ins)</b>	<b>10</b>	<b>Tube</b>

**Document Revision History**

Date	Revision	
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