JST41Z-1600BW 40A TRIAC

Rev.A.1.1

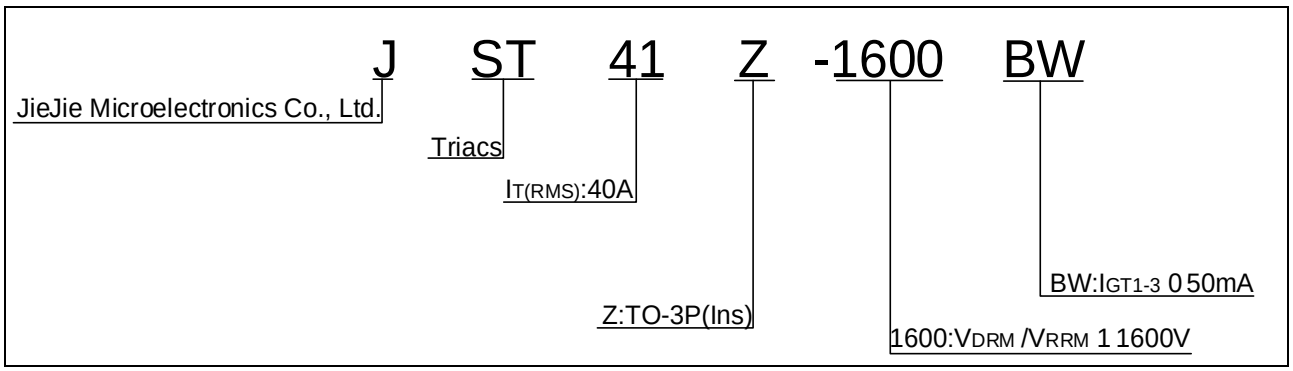
The JST41Z-1600BW triac is suitable for general purpose AC switching. It can be used as an ON/OFF function in applications such as heating regulation, induction motor starting circuits, for phase control operation in light dimmers, motor speed controllers. JST41Z-1600BW snubberless triac is especially recommended for use on inductive loads. By using an internal ceramic pad, JST41Z-1600BW provides a rated insulation voltage of 2500 VRMS, complying with UL standards (File ref: E252906).

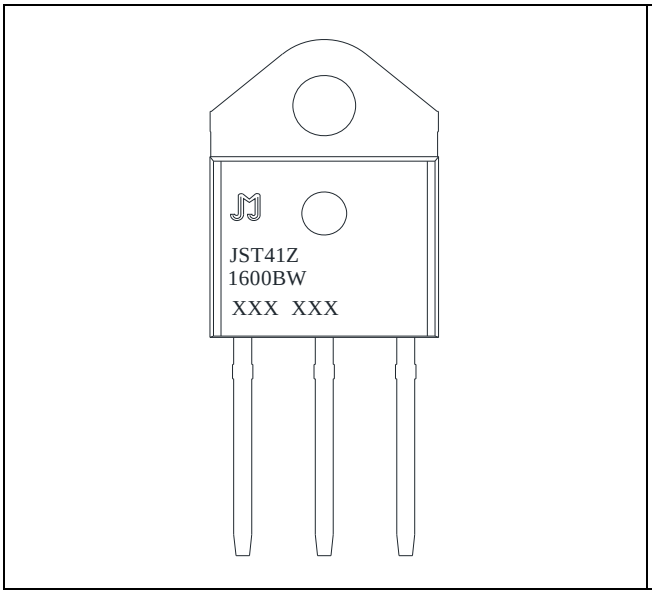
Average gate power dissipation (T_j=125)	$P_{G(AV)}$	0.5	W
Peak gate power	P_{GM}	40	W
Peak pulse voltage (T_j=25 ; non-repetitive,off-state;FIG.7)	V_{pp}	1.2	kV

(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.	0.2	V
I_L	I_G=1.2I_{GT}	-	MAX.	80	mA
				200	
I_H	I_T =500mA		MAX.	100	mA
dV/dt	V_D=1070V 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=25		TYP.	10	μs
t_{off}				70	

Symbol	Parameter		Value(MAX.)	Unit
V_{TM}	I_{TM} =60A t_p=380μs	T_j=25	1 .8	V
V_{TO}	Threshold voltage	T_j=125	0.78	V
R_D	Dynamic resistance	T_j=125	27	mΩ
I_{DRM}	V_D=$V_{DRM}$$V_R$ =V_{RRM}	T_j=25	20	μA
I_{RRM}		T_j=125	10	mA


J
ST
41
Z
-1600
BW
JieJie Microelectronics Co., Ltd.
Triacs
IT(RMS):40A
Z:TO-3P(Ins)
1600:VDRM /VRRM 1 1600V
BW:IGT1-3 0 50mA


JST41Z
1600BW
XXX XXX

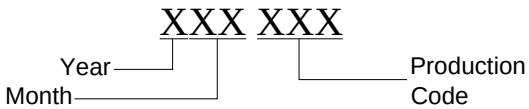

XXX XXX
Year
Month
Production
Code

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

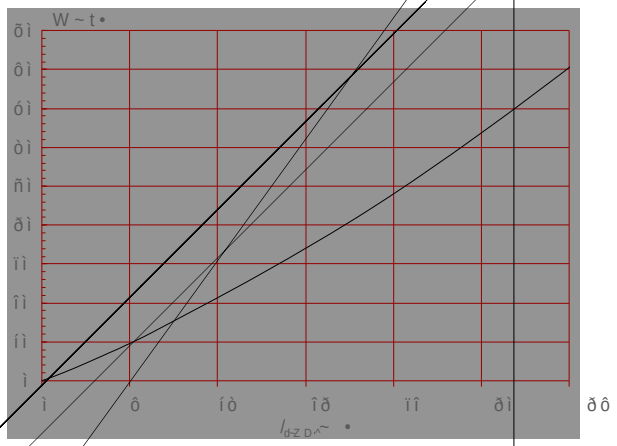


FIG.2: RMS on-state current versus case temperature

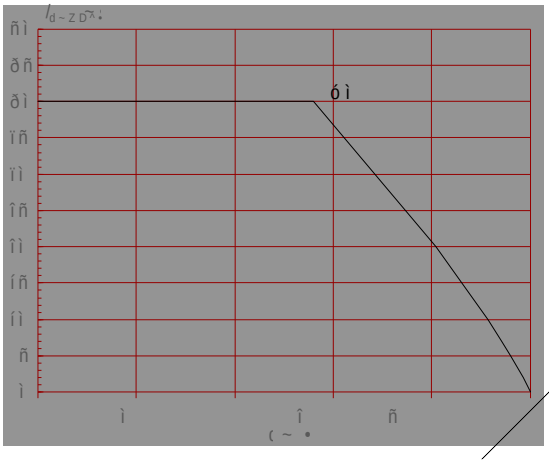


FIG.3: Surge peak on-state current versus number of cycles

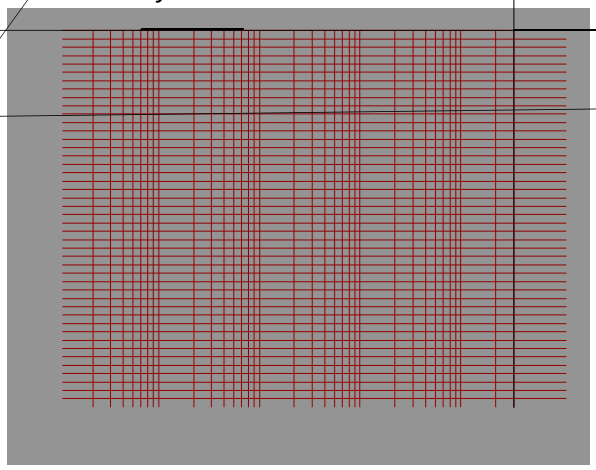
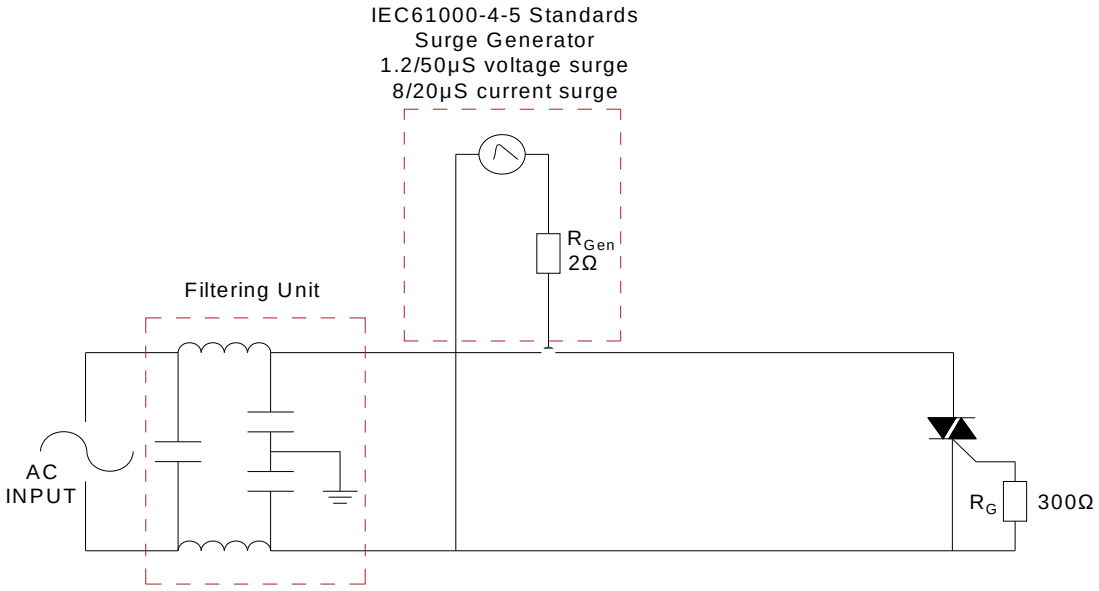


FIG.4: On-state characteristics

FIG.7 ÖTest 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
		-			