DESCRIPTION:

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

ELECTRICAL CHARACTERISTICS(T_j=25 unless otherwise specified)

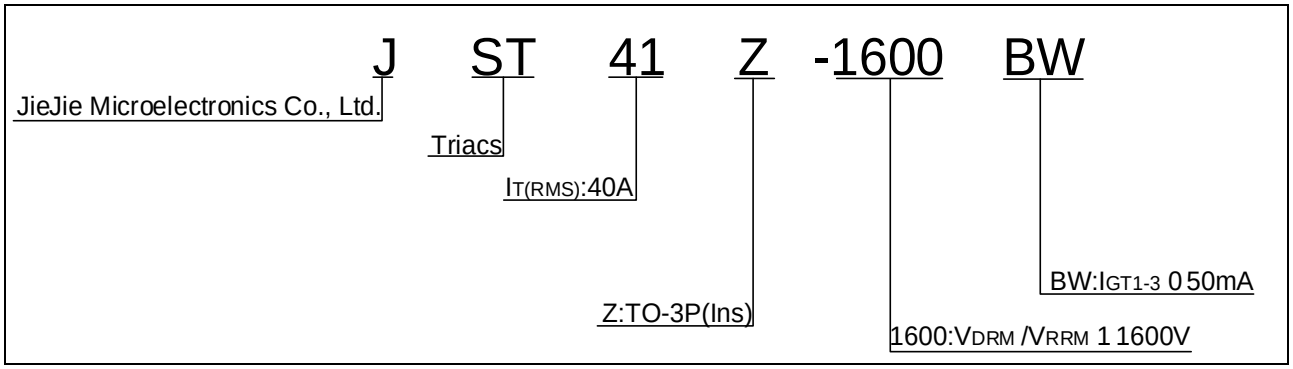
I_{GT}	V_D =12V R_L =33Ω	- -	MAX.	50	mA
V_{GT}		- -	MAX.	1.3	V
V_{GD}	V_D =V_{DRM} T_j=125 R_L =3.3kΩ	- -	MIN.	0.2	V
I_L	I_G=1.2I_{GT}	-	MAX.	80	mA
				200	
I_H	I_T =500mA		MAX.	100	mA
dV/dt	V_D=1070V Gate Open T_j=125		MIN.	1500	V/μs
(dI/dt)c	(dV/dt)c=20V/μs T_j=125		MIN.	25	A/ms
t_{on}	I_G=80mA I_A=400mA I_R=40mA T_j=25		TYP.	10	μs
t_{off}				70	

STATIC CHARACTERISTICS

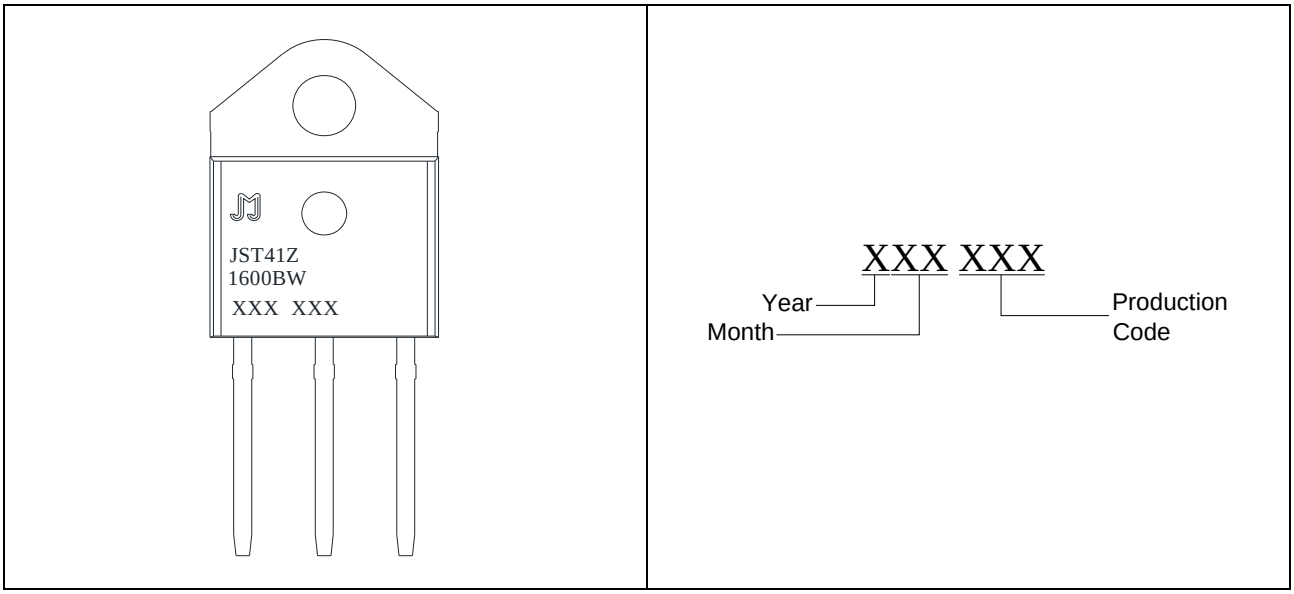
V_{TM}	I_{TM} =60A t_p=380μs	T_j=25	1 .8	V
V_{TO}	Threshold voltage	T_j=125	0.78	V
R_D	Dynamic resistance	T_j=125	27	mΩ
I_{DRM}	V_D=$V_{DRM}$$V_R$ =V_{RRM}	T_j=25	20	μA
I_{RRM}		T_j=125	10	mA

THERMAL RESISTANCES

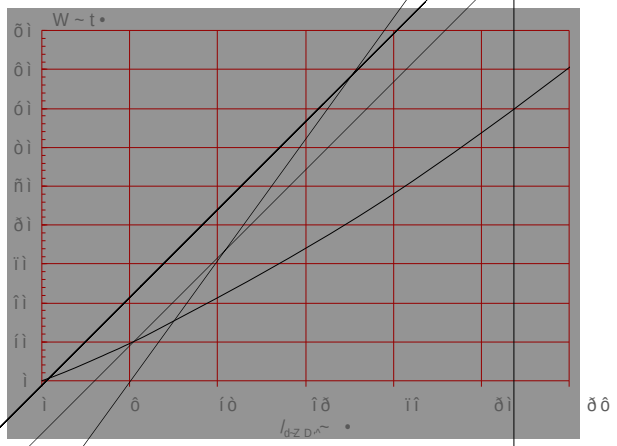
ORDERING INFORMATION



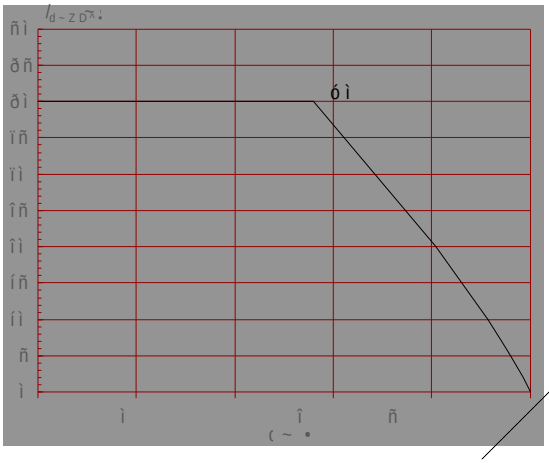
MARKING



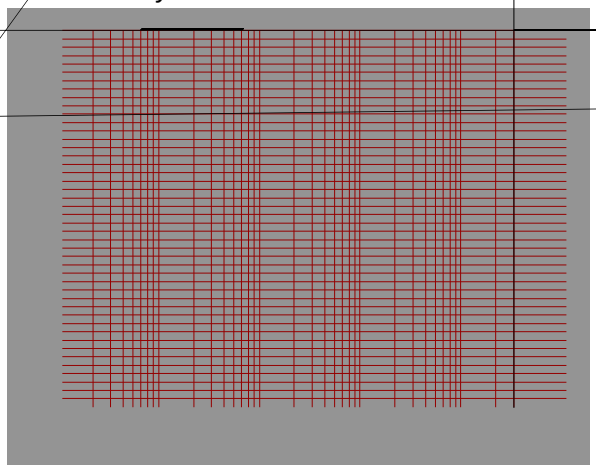
Maximum power dissipation versus RMS on-state current



RMS on-state current versus case temperature

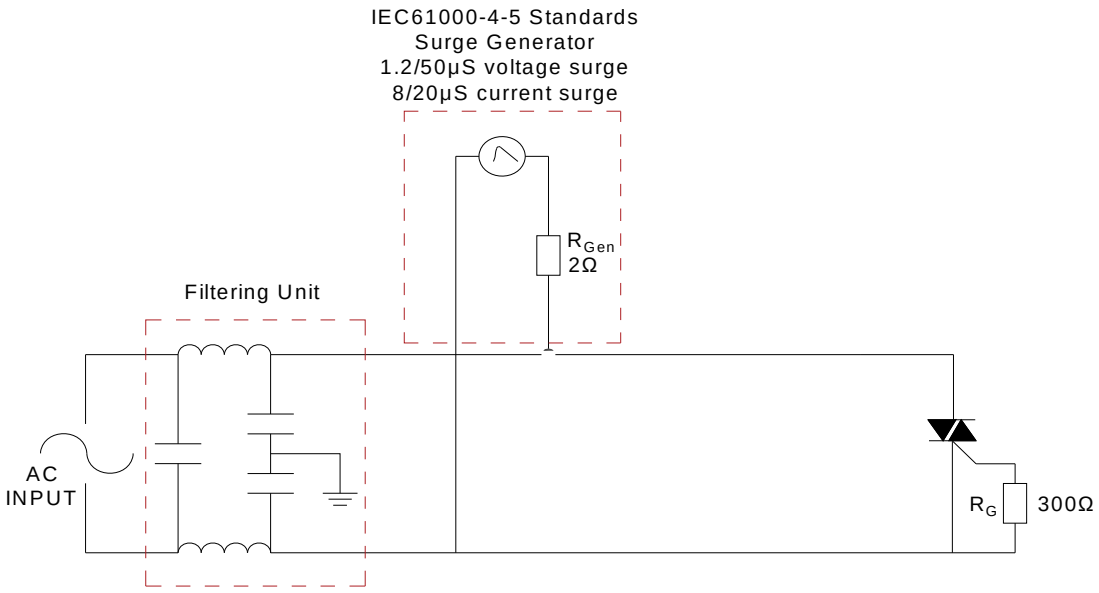


Surge peak on-state current versus number of cycles



On-state characteristics

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



ORDERING INFORMATION
