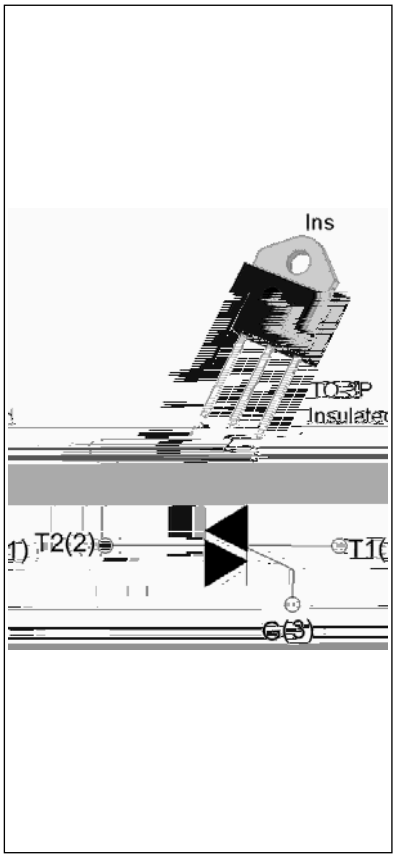
JST30Z-800BW 30A TRIAC

Rev.A.1.1

DESCRIPTION:

The JST30Z-800BW 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. JST30Z-800BW snubberless triac is especially recommended for use on inductive loads. By using an internal ceramic pad, JST30Z-800BW provides a rated insulation voltage of 2500 VRMS, complying with UL standards (File ref: E252906). Package TO-3P is RoHS compliant.



MAIN FEATURES

Symbol	Value	Unit
$I_{T(RMS)}$	30	A
V_{DRM} /V_{RRM}	800	V
I_{GT} / /	50/50/50	mA

ABSOLUTE MAXIMUM RATINGS

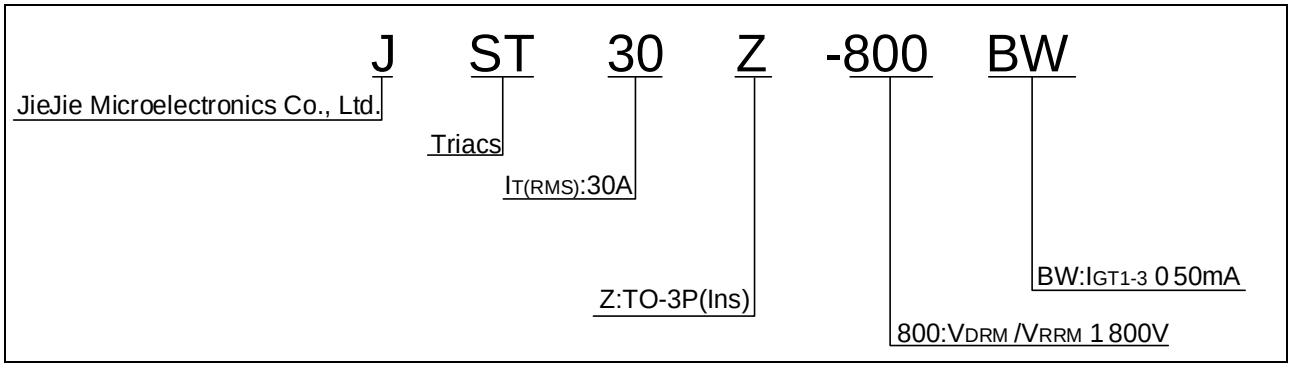
Parameter	Symbol	Value	Unit
Storage junction temperature range	T_{stg}	-40-150	
Operating junction temperature range	T_j	-40-125	
Repetitive peak off-state voltage (T_j=25)	V DRM	800	V
Repetitive peak reverse voltage (T_j=25)	V RRM	800	V
RMS on-state current (T_C 079)	$I_{T(RMS)}$	30	A
Non repetitive surge peak on-state current (full cycle , t_p=20ms , T_j=25)	I_{TSM}	300	A
Non repetitive surge peak on-state current (full cycle , t_p=16.6ms , T_j=25)		330	
I^2t value for fusing (t_p=10ms , T_j=25)	I 2t	450	A^2s
Critical rate of rise of on-state current (I_G=2 hI GT , f=100Hz , T_j=125)	dI/dt	100	A/μs
Peak gate current (t_p=20μs , T_j=125)	I GM	4	A

Average gate power dissipation (T_j=125)	$P_{G(AV)}$	0.5	W
Peak gate power	P_{GM}	10	W
Peak pulse voltage (T_j=25 ; non-repetitive,off-state;FIG.7)	V_{pp}	2.5	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.	0.15	V
I	I =1.2I	-	MAX	80	mA
					nA

ORDERING INFORMATION



MARKING

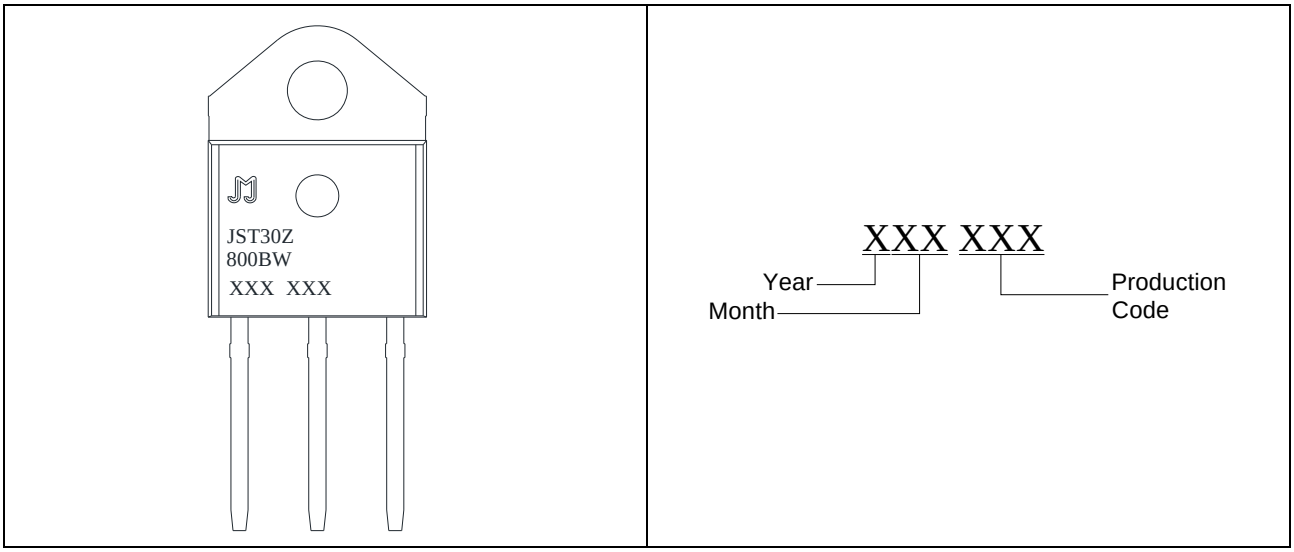


FIG.1: Maximum power dissipation versus RMS on-state current



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

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



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Information furnished in this document is believed to be accurate and reliable. However, Jiangsu JieJie Microelectronics Co., Ltd. ” A ɾ Ŏ abo ﻩ urmahisan Š ice ̣