



JST80T-1600BW 80A TRIAC

Rev.A.1.0

DESCRIPTION:

The JST80T-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. JST80T-1600BW snubberless triac is especially recommended for use on inductive loads. By using a DBC, JST80T-1600BW 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 ($T_j=25^\circ\text{C}$)	V_{DRM}	1600	V
Repetitive peak reverse voltage ($T_j=25^\circ\text{C}$)	V_{RRM}	1600	V
RMS on-state current ($T_c=89^\circ\text{C}$)	$I_{T(RMS)}$	80	A
Non repetitive surge peak on-state current (full cycle, $t_p=20\text{ms}$, $T_j=25^\circ\text{C}$) Non repetitive surge peak on-	I_{TSM}	800	A

Peak gate power	P_{GM}	25	W
Peak pulse voltage ($T_j=25$; non-repetitive,off-state;FIG.7)	V_{pp}	1	kV

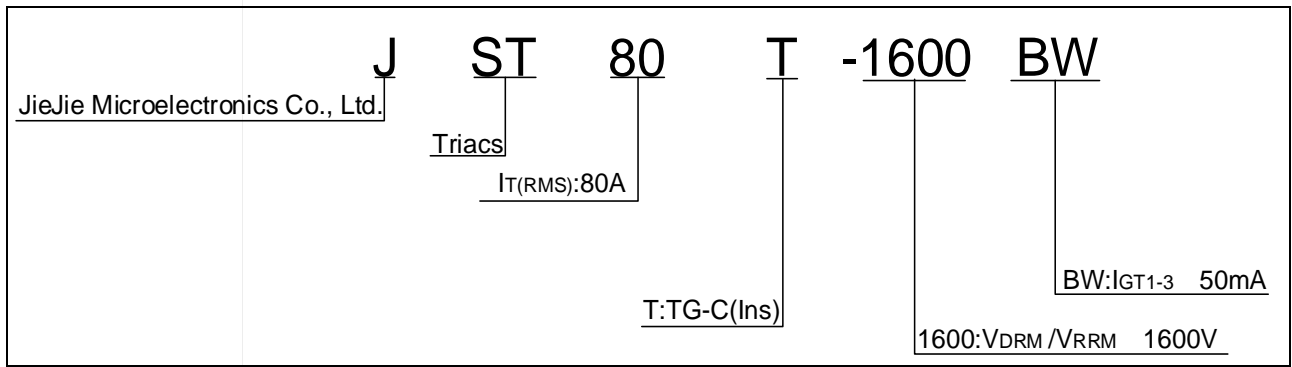
ELECTRICAL CHARACTERISTICS($T_j=25$ unless otherwise specified)

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
				120	
I_H	$I_T=1A$		MAX.	70	mA
dV/dt	$V_D=1070V$ Gate Open $T_j=125$		MIN.	1500	V s
(dl/dt)c	$j=125$		MIN.	28	A/ms
t_{on}	$I_G=10mA I_A=200mA I_R=20mA$ $T_j=25$		TYP.	12	s
t_{off}				80	

STATIC CHARACTERISTICS

Symbol	Parameter	Value(MAX.)	Unit
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ORDERING INFORMATION



MARKING

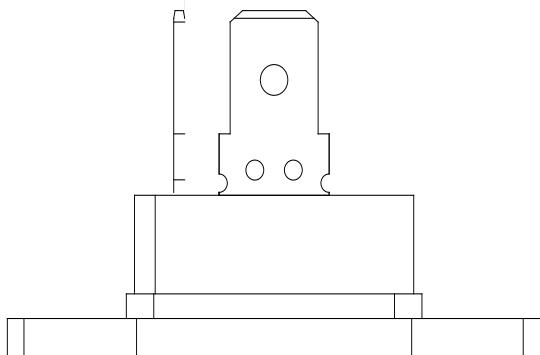


FIG.1: Maximum power dissipation versus RMS on-state current

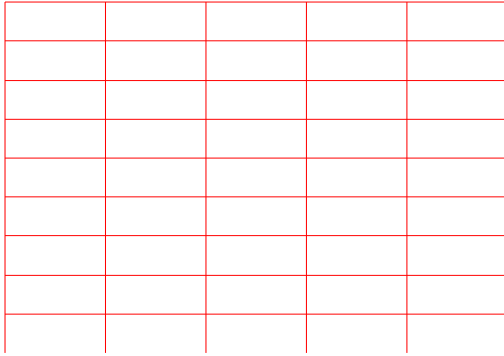
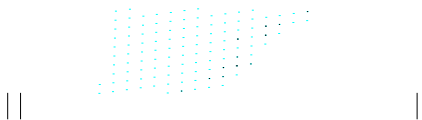


FIG.2: RMS on-state current versus case temperature



PACKAGE MECHANICAL DATA



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