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)	V_{DRM}	1600	V
Repetitive peak reverse voltage (T_j=25)	V_{RRM}	1600	V
RMS on-state current (T_C 89)	$I_{T(RMS)}$	80	A
Non repetitive surge peak on-state current (full cycle , t_p=20ms , T_j=25)	I_{TSM}	800	A
Non repetitive surge peak on-			

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
(dI/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

ORDERING INFORMATION

J	ST	80	T	-1600	BW
JieJie Microelectronics Co., Ltd.	Triacs	$I_{T(RMS)}$:80A	T:TG-C(Ins)	1600:V_{DRM} /V_{RRM} 1600V	BW:I_{GT1-3} 50mA

MARKING

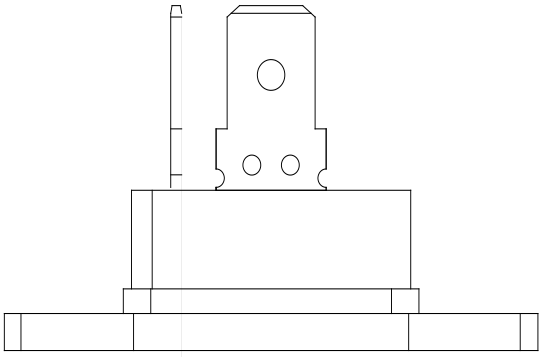
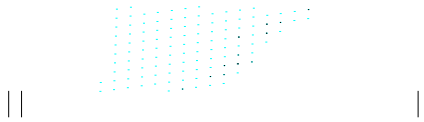


FIG.1: Maximum power dissipation versus RMS on-state current



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

PACKAGE MECHANICAL DATA



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