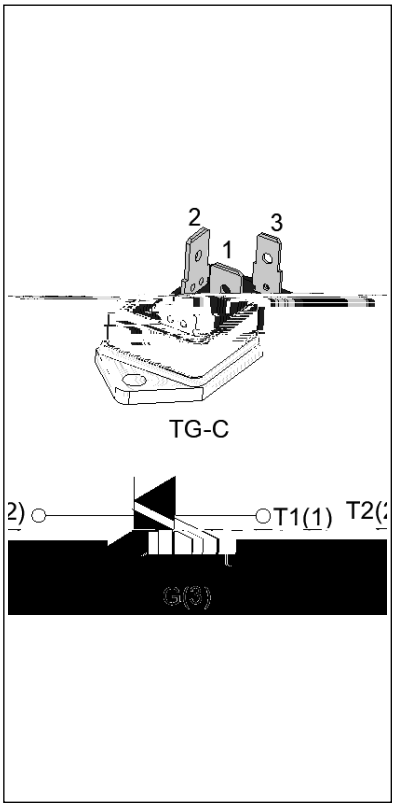
JST80T-1200BW 80A TRIAC

Rev.A.1.0

The JST80T-1200BW 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-1200BW snubberless triac is especially recommended for use on inductive loads. By using a DBC, JST80T-1200BW provides a rated insulation voltage of 2500 VRMS, complying with UL standards
(File ref: E252906). Package TG-C is RoHS compliant.



Symbol	Value	Unit
$I_{T(RMS)}$	80	A
V_{DRM} /V_{RRM}	1200	V
I_{GT} / /	50/50/50	mA

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}	1200	V
Repetitive peak reverse voltage (T_j=25)	V_{RRM}	1200	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-state current (full cycle , t_p=16.6ms , T_j=25)		880	
I^2t value for fusing (t_p=10ms , T_j=25)	I^2t	3200	A^2s
Critical rate of rise of on-state current (I_G=2 I_{GT} , f=100Hz , T_j=125)	dI/dt	100	A/μs
Peak gate current (t_p=20μs , T_j=125)	I_{GM}	10	A
Average gate power dissipation (T_j=125)	$P_{G(AV)}$	0.5	W

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

(T_j=25

J ST 80 T -1200 BW

JieJie Microelectronics Co., Ltd.

Triacs

$I_{T(RMS)}$:80A

T:TG-C(Ins)

1200:V_{DRM} /V_{RRM} 1200V

BW:I_{GT1-3} 50mA

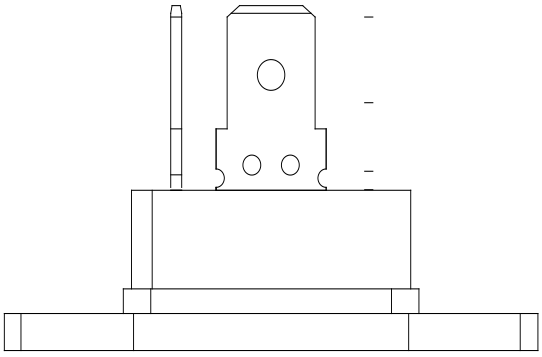


FIG.1: Maximum power dissipation versus RMS on-state current

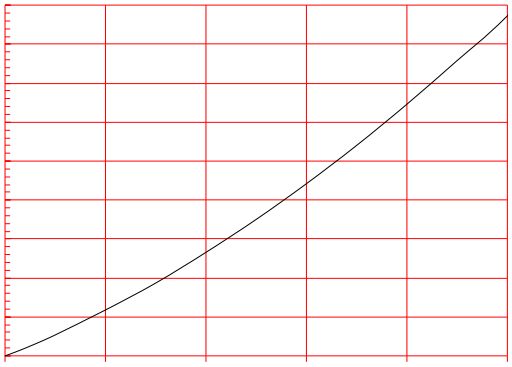


FIG.2: RMS on-state current versus case temperature

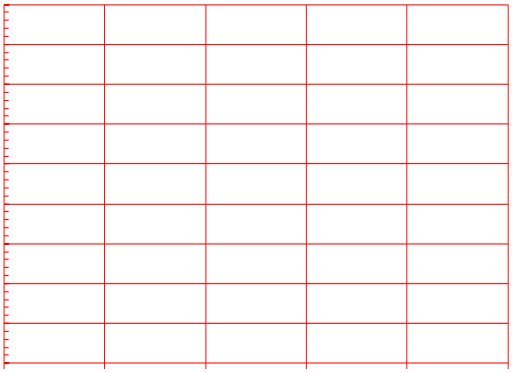


FIG.7 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards

