JST60T-1600BW 60A TRIAC

Rev.A.1.0

The JST60T-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. JST60T-1600BW snubberless triac is especially recommended for use on inductive loads. By using a DBC, JST60T-1600BW provides a rated insulation voltage of 2500 VRMS, complying with UL standards (File ref: E252906). Package TG-C is RoHS compliant.

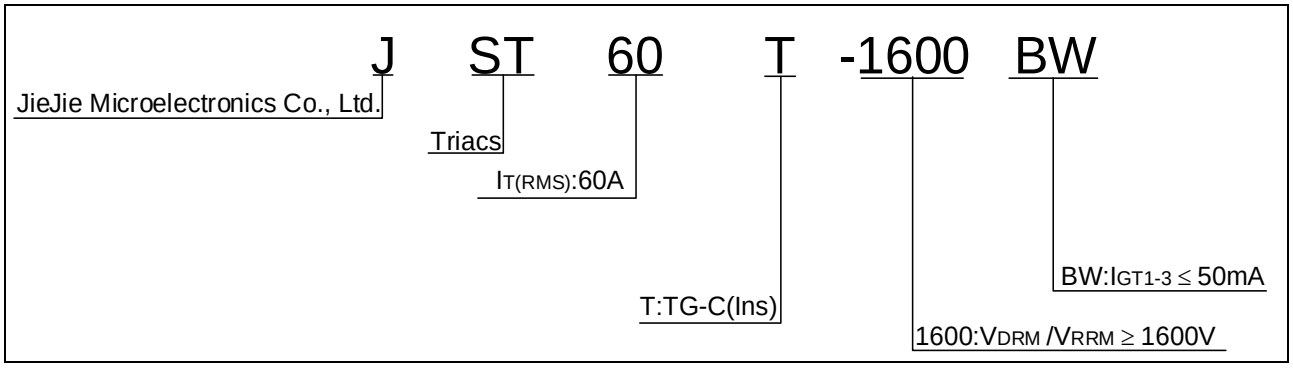
Parameter	Symbol	Value	Unit
Storage junction temperature range	T_{stg}	-40-150	
Operating junction temperature range	T_j	-40-125	
Repetitive peak off-state voltage (T_j=25)	V_{DRM}	1600	V
Repetitive peak reverse voltage (T_j=25)	V_{RRM}	1600	V
RMS on-state current ($T_C \leq$ 94)	$I_{T(RMS)}$	60	A
Non repetitive surge peak on-state current (full cycle , t_p=20ms , T_j=25)		600	
Non repetitive surge peak on-state current (full cycle , t_p=16.6ms , T_j=25)		660	
I^2t value for fusing (t_p=10ms , T_j=25)		1800	
Critical rate of rise of on-state current (I_G=2 × I_{GT} , f=100Hz , T_j=125)		100	
Peak gate current (t_p=20 s , T_j=125)	I_{GM}	8	A

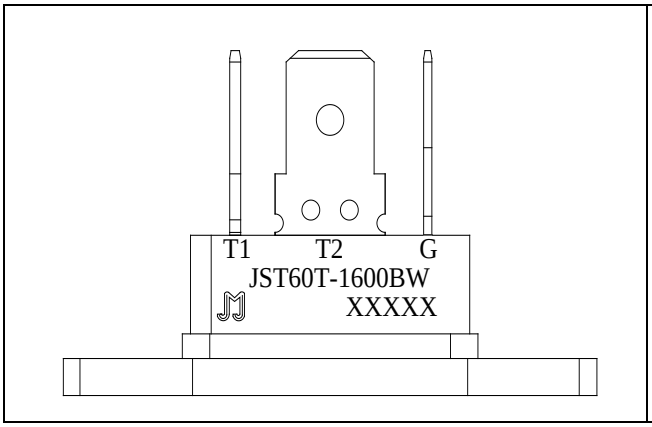
Average gate power dissipation (T_j=125) A-62 42(AV)-74Tw Tf [(t)]TJ 0 Tc 0 Tw 12 0 0 92 245.8

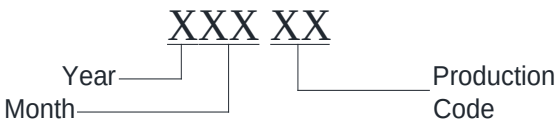
Peak gate power	P_{GM}	10	W
Peak pulse voltage (T_j=25 ; non-repetitive,off-state;FIG.7)	V_{pp}	1.1	kV

(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=1				


J
ST
60
T
-1600
BW
JieJie Microelectronics Co., Ltd.
Triacs
IT(RMS):60A
T:TG-C(Ins)
1600:VDRM /VRRM ≥ 1600V
BW:IGT1-3 ≤ 50mA


T1
T2
G
JST60T-1600BW
XXXXX


XXX XX
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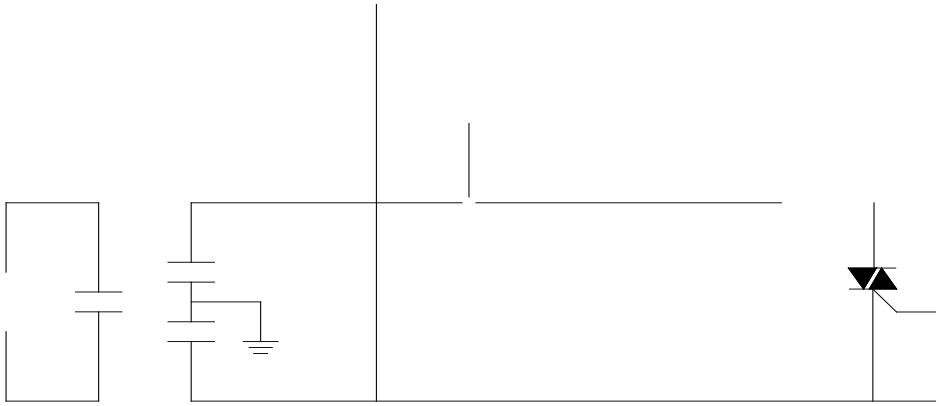
Production
Code

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



Order code	Voltage V_{DRM}/V_{RRM}(V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
		H I- J			
JST60T-1600BW	1600	50	TG-C(Ins)	10	Tube