



## 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.

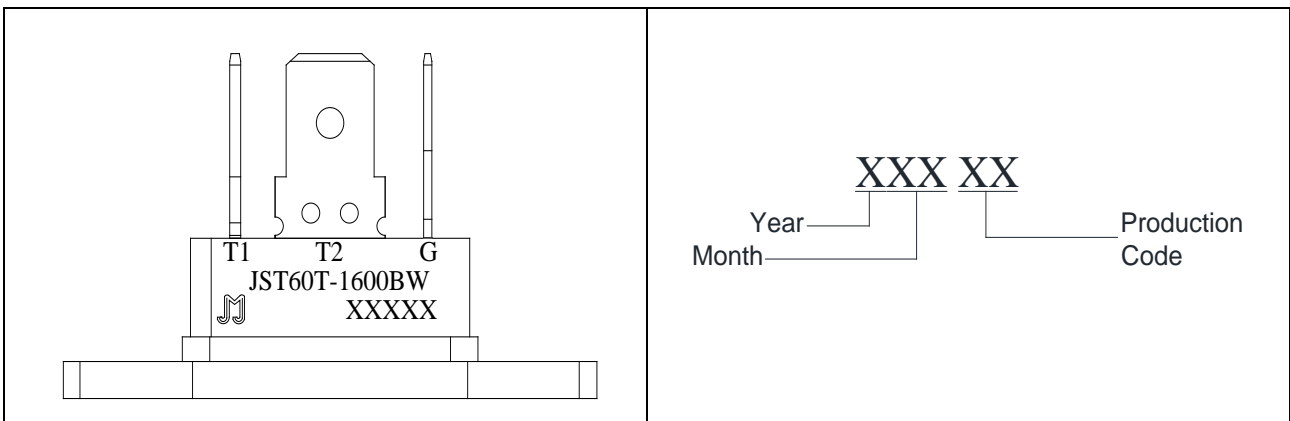
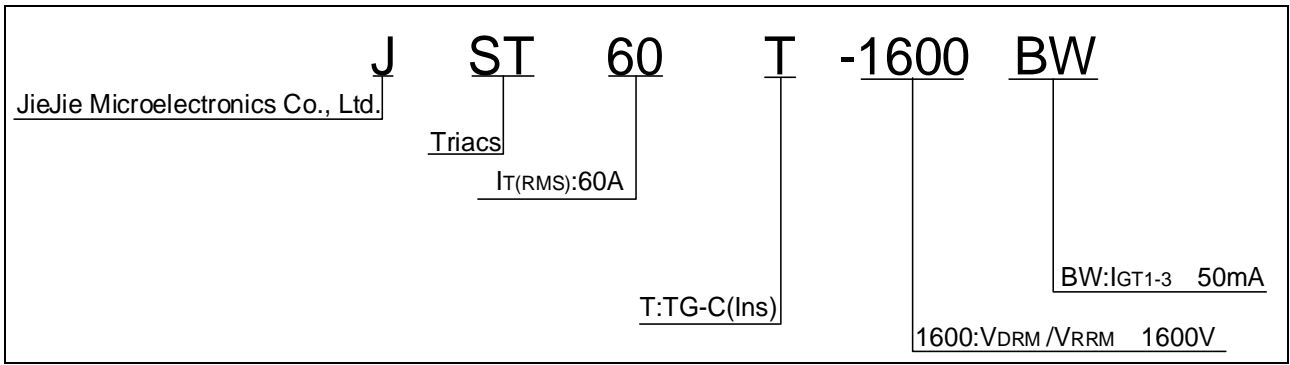
Parameter	Symbol	Value	Unit
Storage junction temperature range	$T_{stg}$	-40-150	
Operating junction temperature range	$T_j$	-40-125	
Repetitive peak off-state voltage ( $T_j=25^\circ\text{C}$ )	$V_{DRM}$	1600	V
Repetitive peak reverse voltage ( $T_j=25^\circ\text{C}$ )	$V_{RRM}$	1600	V
RMS on-state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

Average gate power dissipation ( $T_j=125^\circ\text{C}$ ) 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
$V_{GD}$	$V_D=V_{DRM} T_j=1$				

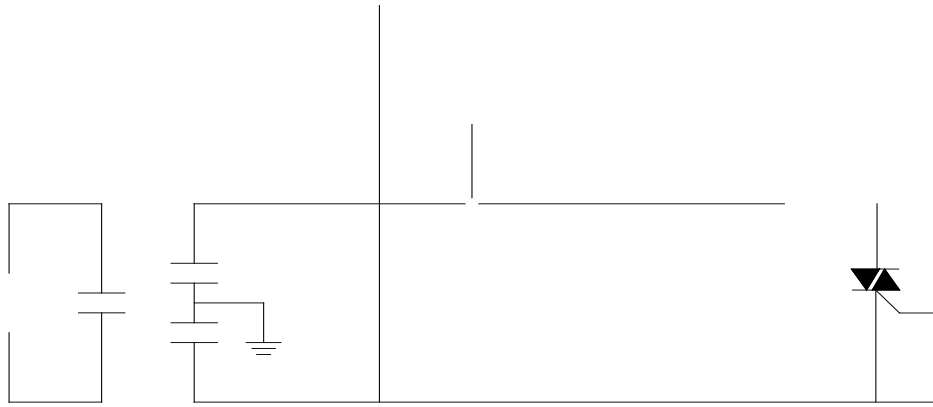


**FIG.1:** Maximum power dissipation versus RMS on-state current



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

FIG.7 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards I N P U T



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

