

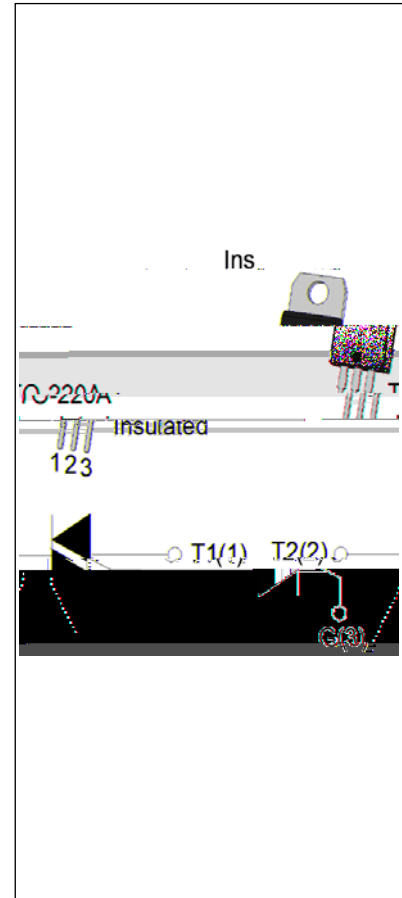


## JST04A-600SW 4A TRIAC

Rev.A.1.2

### DESCRIPTION:

The JST04A-600SW 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. JST04A-600SW snubberless triac is especially recommended for use on inductive loads. It can be driven directly through the MCU I/O port. By using an internal ceramic pad, JST04A-600SW provides a rated insulation voltage of 2500 VRMS, complying with UL standards (File ref: E252906). Package TO-220A is RoHS compliant.



### MAIN FEATURES

Symbol	Value	Unit
$I_{T(RMS)}$	4	A
$V_{DRM}/V_{RRM}$	600	V
$I_{GT} / /$	10/10/10	mA

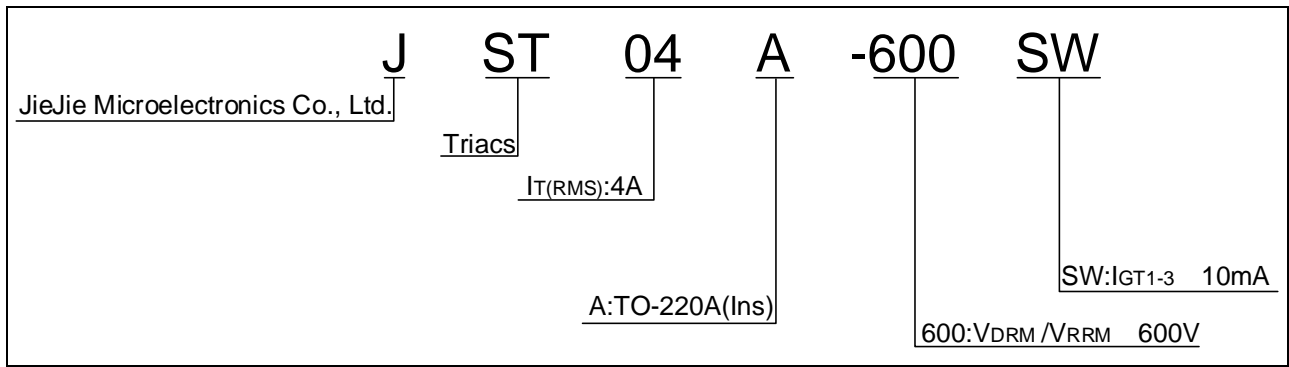
### ABSOLUTE MAXIMUM RATINGS

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 ( $T_j=25^\circ C$ )	$V_{DRM}$	600	V
Repetitive peak reverse voltage ( $T_j=25^\circ C$ )	$V_{RRM}$	600	V
RMS on-state current ( $T_c = 100^\circ C$ )	$I_{T(RMS)}$	4	A
Non repetitive surge peak on-state current (full cycle, $t_p=20ms$ , $T_j=25^\circ C$ )	$I_{TSM}$	40	A
Non repetitive surge peak on-state current (full cycle, $t_p=16.6ms$ , $T_j=25^\circ C$ )		44	
$I^2t$ value for fusing ( $t_p=10ms$ , $T_j=25^\circ C$ )	$I^2t$	8	$A^2s$
Critical rate of rise of on-state current ( $I_G=2 \times I_{GT}$ , $f=100Hz$ , $T_j=125^\circ C$ )	$di/dt$	100	$A/\mu s$

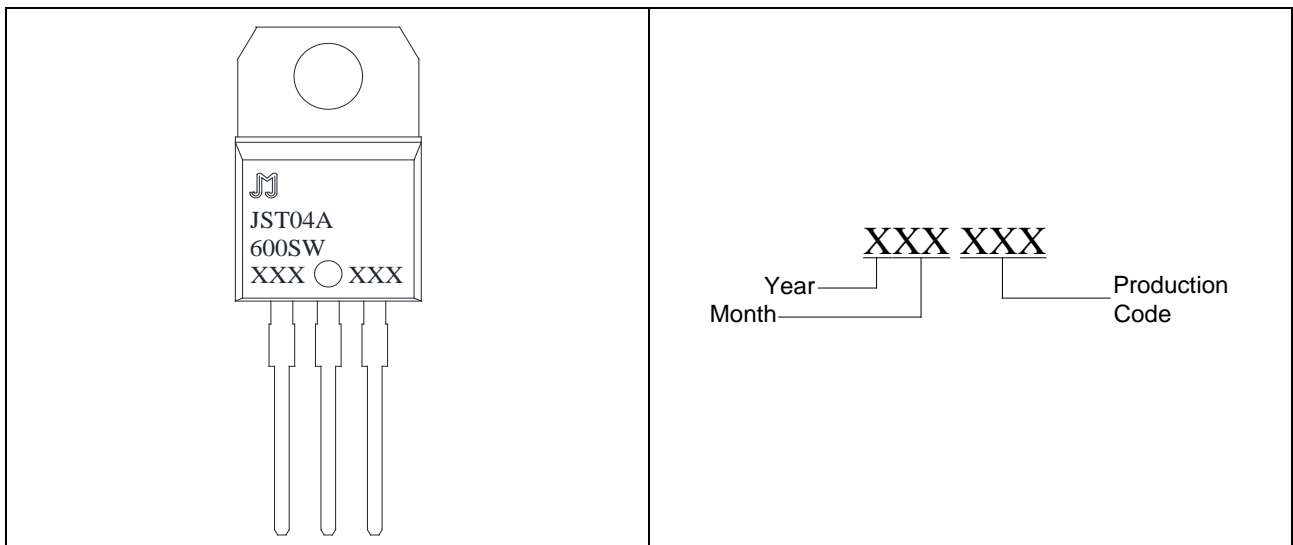
# JST04A-600SW

Peak gate current ( $t_p=20\mu s$ , $T_j=125$ )	$I_{GM}$	4	A
Average gate power dissipation ( $T_j=125$ )	$P_{G(AV)}$	0.5	W
Peak gate power	$P_{GM}$	10	W
Peak pulse voltage ( $T_j=25$ ; non-repetitive,off-state;FIG.7)	$V_{pp}$	3	kV

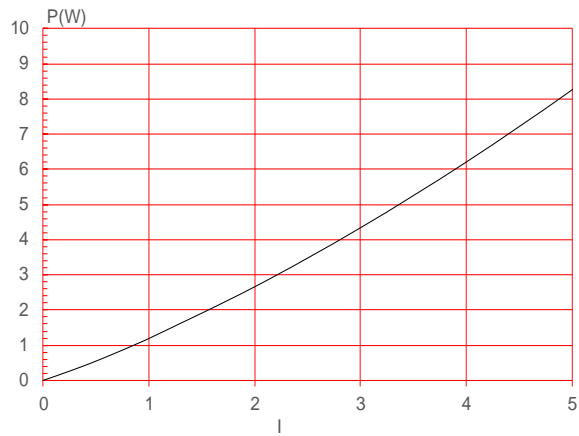
ORDERING INFORMATION



MARKING

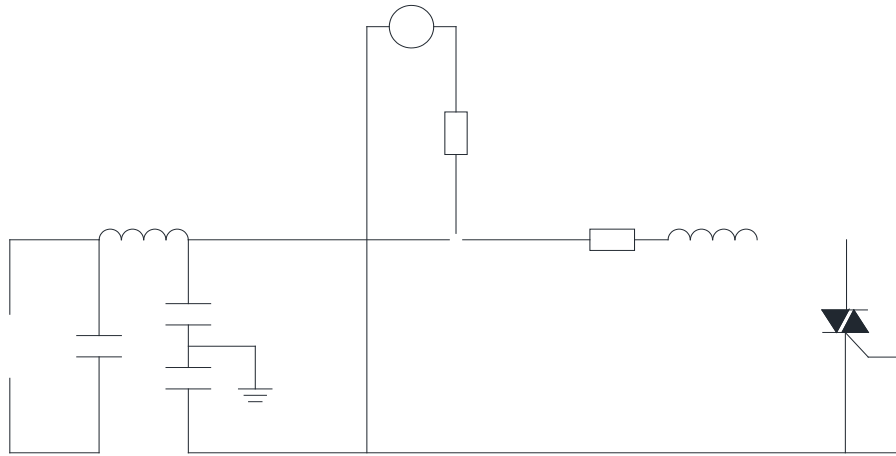


**FIG.1:** Maximum power dissipation versus RMS on-state current



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

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



**ORDERING INFORMATION**

<b>Order code</b>	<b>Voltage <math>V_{DRM}/V_{RRM}</math> (V)</b>	<b>IGT(mA)</b> - -	<b>Package</b>	<b>Base qty. (pcs)</b>	<b>Delivery mode</b>
<b>JST04A-600SW</b>	<b>600</b>	<b>10</b>	<b>TO-220A(Ins)</b>	<b>50</b>	<b>Tube</b>

PACKAGE MECHANICAL DATA

