



## JST12C-1000SW 12A TRIAC

Rev.A.1.1

### DESCRIPTION:

The JST12C-1000SW 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. JST12C-1000SW snubberless triac is especially recommended for use on inductive loads. It can be driven directly through the MCU I/O port. From T2 terminals to external heatsink. Package TO-220C 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 ( $T_j=25^\circ\text{C}$ )	$V_{DRM}$	1000	V
Repetitive peak reverse voltage ( $T_j=25^\circ\text{C}$ )	$V_{RRM}$	1000	V
RMS on-state current ( $T_c=103^\circ\text{C}$ )	$I_{T(RMS)}$	12	A
Non repetitive surge peak on-state current (full cycle, $t_p=20\text{ms}$ , $T_j=25^\circ\text{C}$ )	$I_{TSM}$		

Peak pulse voltage  
( $T_j=25$  ; non-repetitive, off-state; FIG.7)

$V_{pp}$

4

kV V4

ORDERING INFORMATION

J    ST    12    C    -1000    SW  
JieJie Microelectronics Co., Ltd.    Triacs

FIG.1: Maximum power dissipation vs. junction temperature (T<sub>j</sub>)

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







