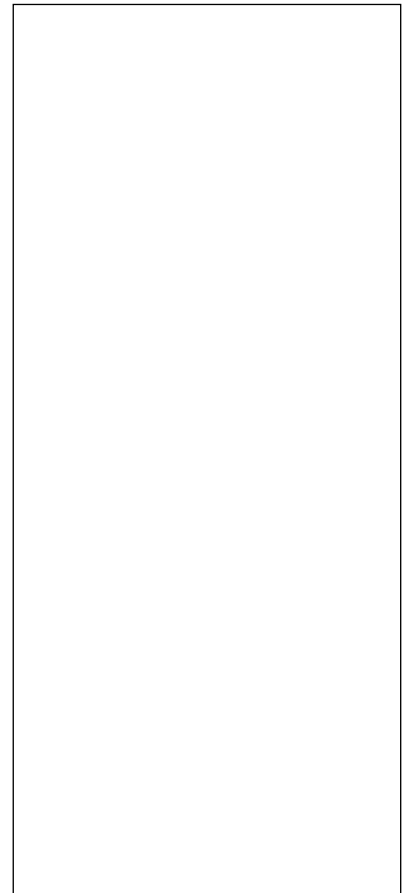


**JST08A-600TW 8A TRIAC**

Rev.A.1.1

DESCRIPTION:

The JST08A-600TW 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. JST08A-600TW 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, JST08A-600TW 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
$I_{T(RMS)}$	8	A
V_{DRM}/V_{RRM}	600	V
$I_{GT} / /$	5/5/5	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 ($T_c = 97^\circ C$)	$I_{T(RMS)}$	8	A
Non repetitive surge peak on-state current (full cycle, $t_p=20ms$, $T_j=25^\circ C$)	I_{TSM}	80	A
Non repetitive surge peak on-state current (full cycle, $t_p=16.6ms$, $T_j=25^\circ C$)		88	
I^2t value for fusing ($t_p=10ms$, $T_j=25^\circ C$)	I^2t	32	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	50	$A/\mu s$

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}	1.5	kV

ELECTRICAL CHARACTERISTICS ($T_j=25$ unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	$V_D=12V$ $R_L=33$	- -	MAX.	5	mA
V_{GT}		- -	MAX.	1	V
V_{GD}	$V_D=V_{DRM}$ $T_j=125$ $R_L=3.3k$	- -	MIN.	0.2	V

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

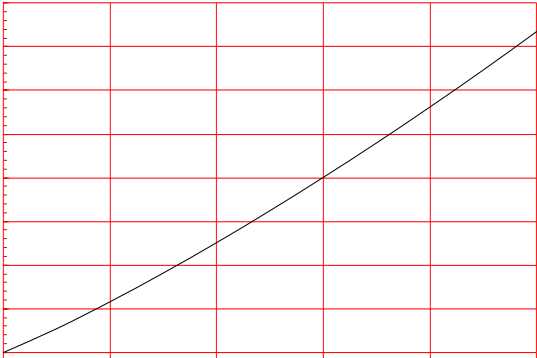


FIG.2: RMS on-state current versus case temperature

v6W-

ORDERING INFORMATION

Order code

MC 6i re f* 57 714.4618.4775.66.00#de

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