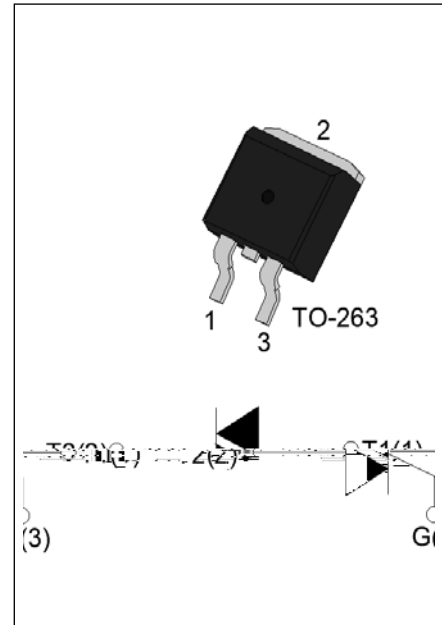


JST08E-600C 8A TRIAC

Rev.A.1.1

DESCRIPTION:

The JST08E-600C 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. Package TO-263 is RoHS compliant.


MAIN FEATURES

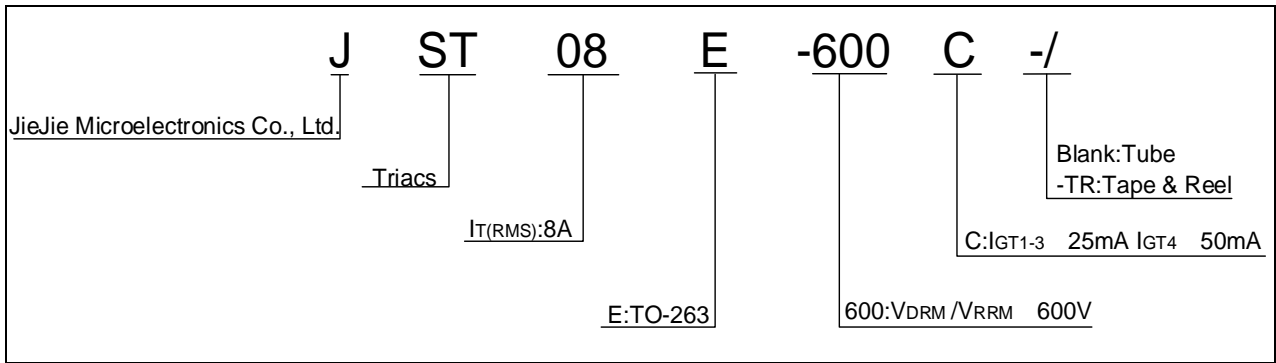
Symbol	Value	Unit
$I_{T(RMS)}$	8	A
V_{DRM}/V_{RRM}	600	V
$I_{GT} / / /$	25/25/25/50	mA

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 ($T_j=25^\circ\text{C}$)		V_{DRM}	600	V
Repetitive peak reverse voltage ($T_j=25^\circ\text{C}$)		V_{RRM}	600	V
RMS on-state current ($T_c = 107^\circ\text{C}$)		$I_{T(RMS)}$	8	A
Non repetitive surge peak on-state current (full cycle, $t_p=20\text{ms}$, $T_j=25^\circ\text{C}$)		I_{TSM}	80	A
Non repetitive surge peak on-state current (full cycle, $t_p=16.6\text{ms}$, $T_j=25^\circ\text{C}$)			88	
I^2t value for fusing ($t_p=10\text{ms}$, $T_j=25^\circ\text{C}$)		I^2t	32	A^2s
Critical rate of rise of on-state current ($I_G=2 I_{GT}$, $f=100\text{Hz}$, $T_j=125^\circ\text{C}$)	-	di/dt	80	A/s
	-		40	
Peak gate current ($t_p=20\text{ }\mu\text{s}$, $T_j=125^\circ\text{C}$)		I_{GM}	4	A
Average gate power dissipation ($T_j=125^\circ\text{C}$)		$P_{G(AV)}$	0.5	W
Peak gate power		P_{GM}	10	W
Peak pulse voltage ($T_j=25^\circ\text{C}$; non-repetitive, off-state; FIG.8)		V_{PP}	1	kV

ELECTRICAL CHARACTERISTICS ($T_j=25$

ORDERING INFORMATION



MARKING

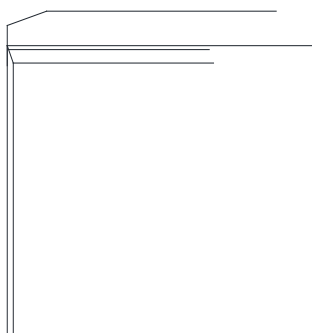


FIG.1: Maximum power dissipation versus RMS on-state current

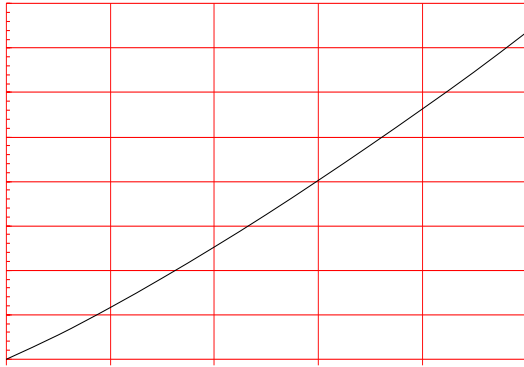


FIG.2: RMS on-state current versus case temperature



FIG.3: RMS on-state current versus ambient temperature (printed circuit board FR4,copper)



FIG.4: Surge peak on-state current versus number of cycles

FIG.7: Relative variations of gate trigger current, holding current and latching current versus junction temperature

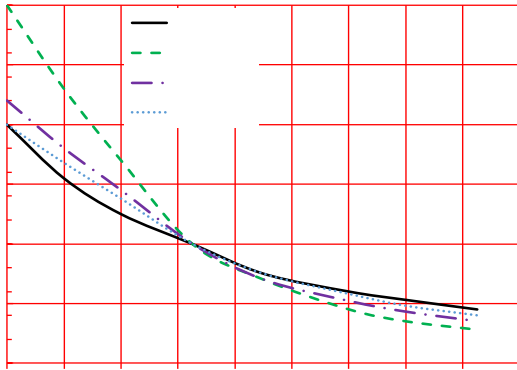
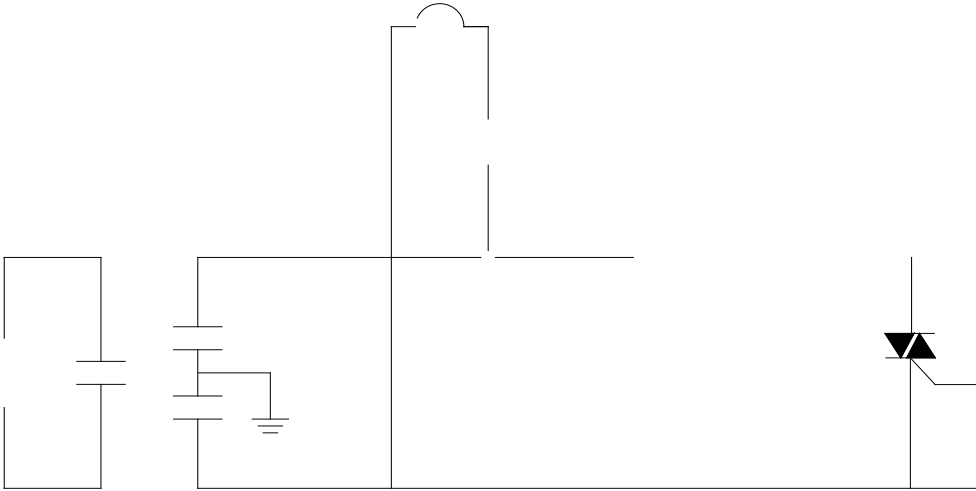


FIG.8: Test circuit for inductive and resistive loads to IEC-61000-4-5 standards



ORDERING INFORMATION

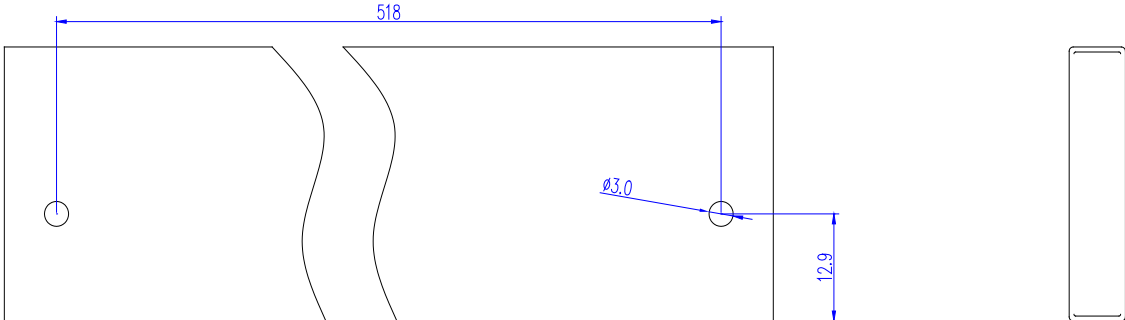
Order code	Voltage V_{DRM}/V_{RRM} (V)	IGT(mA)		Package	Base qty. (pcs)	Delivery mode
		-	-			
JST08E-600C	600	25	50	TO-263	50	Tube
JST08E-600C-TR					800	Tape & Reel

Document Revision History

Date	Revision	Changes
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JST08E-600C

DELIVERY MODE



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