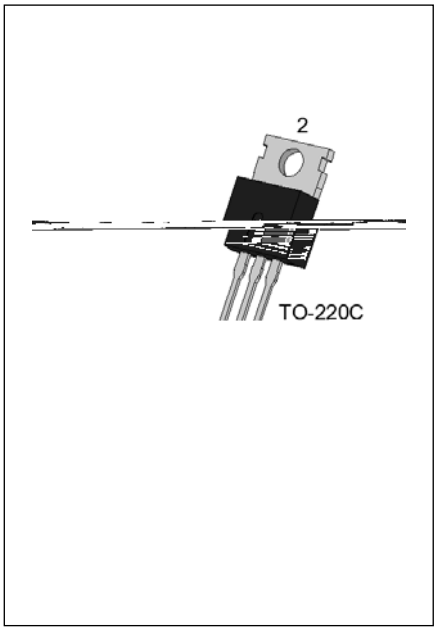
JST08C-600C 8A TRIAC

Rev.A.1.1

DESCRIPTION:

The JST08C-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. From T2 terminals to external heatsink. Package TO-220C 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

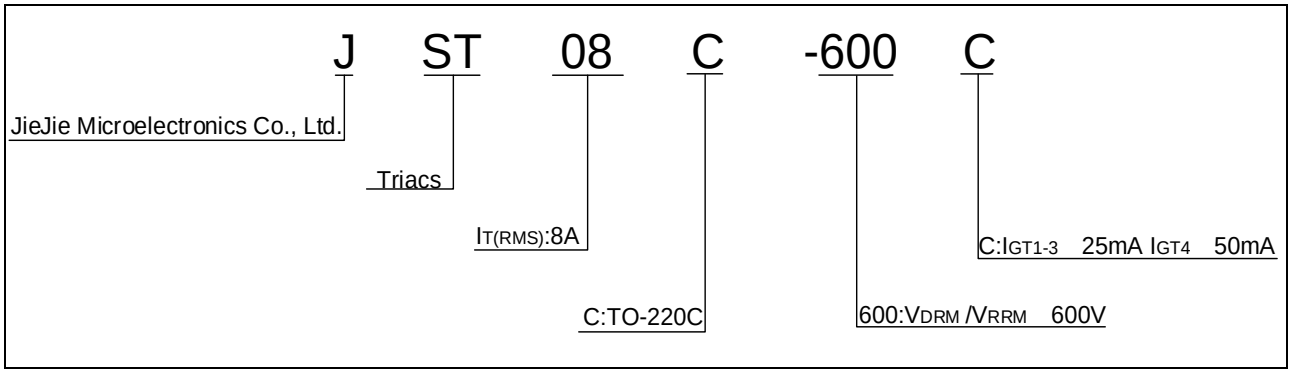
ABSOLUTE MAXIMUM RATINGS

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)		V_{DRM}	600	V
Repetitive peak reverse voltage (T_j=25)		V_{RRM}	600	V
RMS on-state current (T_C 108)		$I_{T(RMS)}$	8	A
Non repetitive surge peak on-state current (full cycle , t_p=20ms , T_j=25)		I_{TSM}	80	A
Non repetitive surge peak on-state current (full cycle , t_p=16.6ms , T_j=25)			88	
I^2t value for fusing (t_p=10ms , T_j=25)		I^2t	32	A^2s
Critical rate of rise of on-state current (I_G=2×I_{GT} , f=100Hz , T_j=125)	-	dI/dt	80	A s
	-		40	
Peak gate current (t_p=20 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	kV

ELECTRICAL CHARACTERISTICS (T_j=25 unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	V_D=12V R_L=33	- -	MAX.	25	mA
				50	
V_{GT}		ALL	MAX.	1	V
V_{GD}	V_D=V_{DRM} T_j=125 R_L=3.3k	ALL	MIN.	0.2	V
I_L	I_G=1.2I_{GT}	- -	MAX.	40	mA
				80	
I_H	I_T=200mA		MAX.	30	mA

ORDERING INFORMATION



MARKING

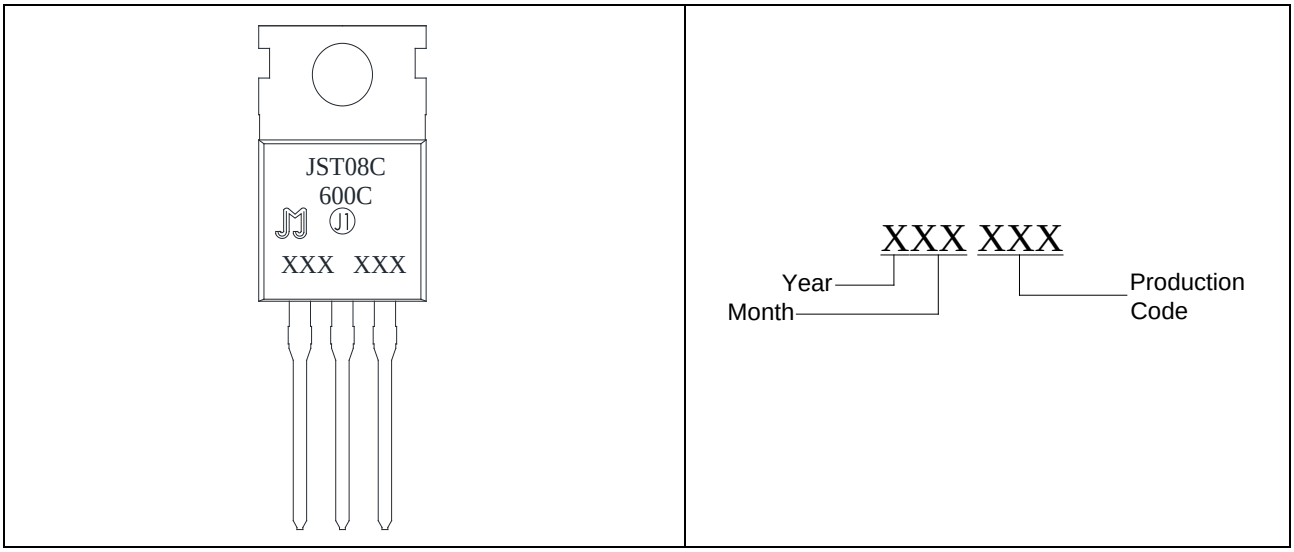


FIG.1: Maximum power dissipation versus RMS on-state current

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