JST139F-600F 16A TRIAC

Rev.A.1.1

DESCRIPTION:

The JST139F-600F 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. By using an external plastic package, JST139F-600F provides a rated insulation voltage of 2000 VRMS, complying with UL standards (File ref: E252906). Package TO-220F 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)		V_{DRM}	600	V
Repetitive peak reverse voltage (T_j=25)		V_{RRM}	600	V
RMS on-state current ($T_C \leq 70$)		$I_{T(RMS)}$	16	A
Non repetitive surge peak on-state current (full cycle , t_p=20ms , T_j=25)		I_{TSM}	140	A
Non repetitive surge peak on-state current (full cycle , t_p=16.6ms , T_j=25)			154	
I^2t value for fusing (t_p=10ms , T_j=25)		I^2t	98	A^2s
Critical rate of rise of on-state current (I_G=2 × I_{GT} , f=100Hz , T_j=125)	-	dI/dt	100	A/μs
	-		70	
Peak gate current (t_p=20μs , T_j=125)		I_{GM}	4	A
Average gate power dissipation (T_j=125)		$P_{G(AV)}$		

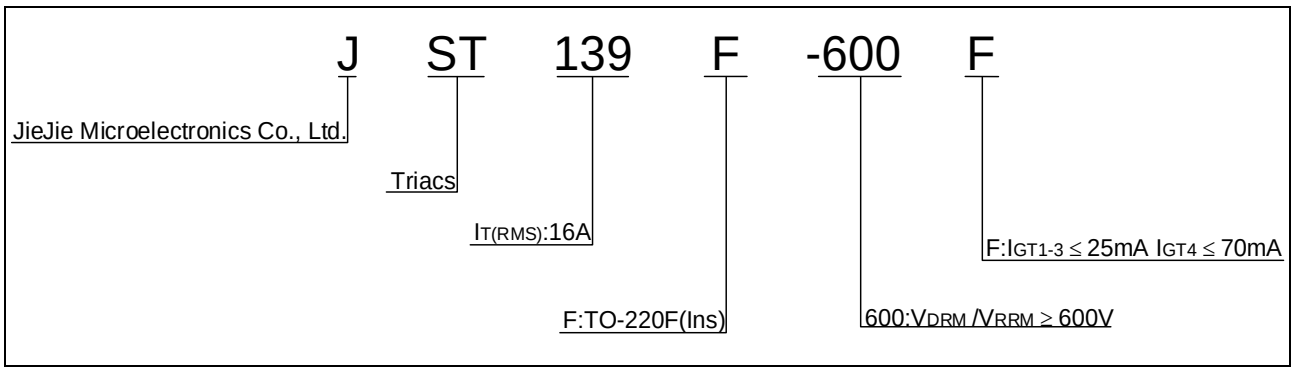
Peak pulse voltage (T_j=25 ; non-repetitive,off-state;FIG.7)	V_{pp}	1	kV

ELECTRICAL CHARACTERISTICS (T_j=25 unless otherwise specified)

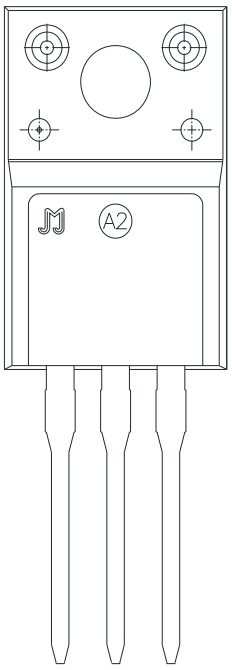
Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	V_D=12V R_L=33Ω	- -	MAX.	25	mA
				70	
V_{GT}		ALL	MAX.	1	V
V_{GD}	V_D=V_{DRM} T_j=125 R_L=3.3kΩ	ALL	MIN.	0.2	V
I_L	I_G=1.2I_{GT}	- -	MAX.	50	mA

100 M=‘ O

ORDERING INFORMATION



MARKING



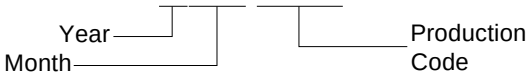


FIG.1:

ORDERING INFORMATION

Order code	Voltage V_{DRM}/V_{RRM} (V)	IGT(mA)		Package	Base qty. (pcs)	Delivery mode
		-	-			
JST139F-600F	6/	0Ↄ		F î ⎽ ᵇ ⊥⁻	5c	K ʠebe

PACKAGE MECHANICAL DATA



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