



JST137F-600F 8A TRIAC

Rev.A.1.1

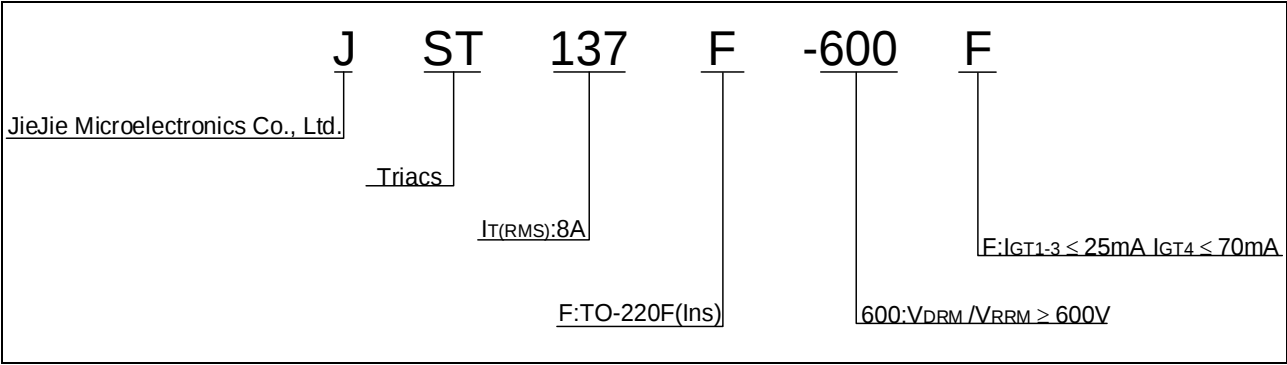
The JST137F-600F triac is suitable for general purpose AC switching. It can be used as an ON/OFF function in applications such as heating regulation, induction motor starting circuits, for phase control operation in light dimmers, motor speed controllers. By using an external plastic package, JST137F-600F provides a rated insulation voltage of 2000 VRMS, complying with UL standards (File ref: E252906). Package TO-220F is RoHS compliant.

Symbol	Value	Unit
$I_{T(RMS)}$	8	A
V_{DRM}/V_{RRM}	600	V
$I_{GT} / / /$	25/25/25/70	mA

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 ≤ 74)		I _{T(RMS)}	8	A
Non repetitive surge peak on-state current (full cycle , t _p =20ms , T _j =25)		I _{TSM}	65	A
Non repetitive surge peak on-state current (full cycle , t _p =16.6ms , T _j =25)			72	
I ² t value for fusing (t _p =10ms , T _j =25)		I ² t	21	A ² s
Critical rate of rise of on-state current (I _G =2 × I _{GT} , f=100Hz , T _j =125)	- -	dI/dt	100	A/μs
			50	
Peak gate current (t _p =20μs , 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}	4	kV
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V V V



Maximum power dissipation versus RMS
te current

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

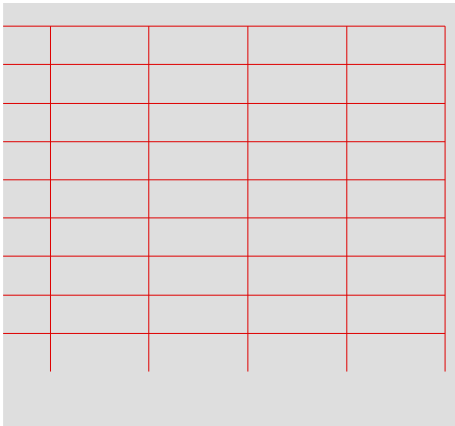
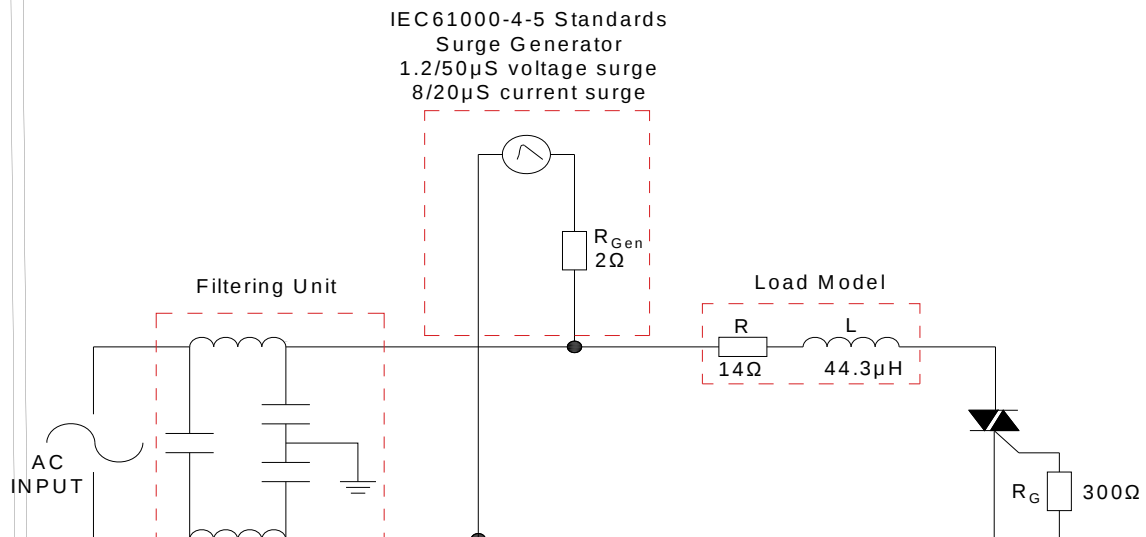


FIG.7 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards





Order code	Voltage $V_{\text{DRM}}/V_{\text{RRM}}$ (V)	IGT(mA)		Package	Base qty. (pcs)	Delivery mode
		- -				
JST137F-600F	600	25	70	TO-220F(Ins)	50	Tube

Document Revision History

Date	Revision	Changes
Apr.14, 2023	A.1.0	Last updated
Oct.15, 2025	A.1.1	Revise PACKAGE MECHANICAL DATA



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