



JST137D-600D 8A TRIAC

Rev.A.1.0

The JST137D-600D 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-262 is RoHS compliant.

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)

(T_j=25 unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
I _{GT}	V _D =12V R _L =33	- -	MAX.	5	mA
				10	
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.	15	mA
				20	
I _H	I _T =500mA		MAX.	10	mA
dV/dt	V _D =400V Gate Open T _j =125		MIN.	80	V s
(dV/dt) _c	(dI/dt) _c =2.7A/ms, T _j =125		MIN.	2	
t _{on}	I _G =20mA I _A =200mA I _R =20mA T _j =25		TYP.	1.2	s
t _{off}				15	

Symbol	Parameter		Value(MAX.)	Unit
V _{TM}	I _{TM} =10A t _p =380 s	T _j =25	1.5	V
V _{TO}	Threshold voltage	T _j =125	0.8	V
R _D	Dynamic resistance	T _j =125	53	
I _{DRM}	V _D =V _{DRM} V _R =V _{RDM}	T _j =25	5	A
I _{RDM}		T _j =125	0.35	mA

Symbol	Parameter	Value	Unit
R _{th(j-c)}	junction to case (AC)	2.2	/W
R _{th(j-a)}	junction to ambient (AC)	60	/W

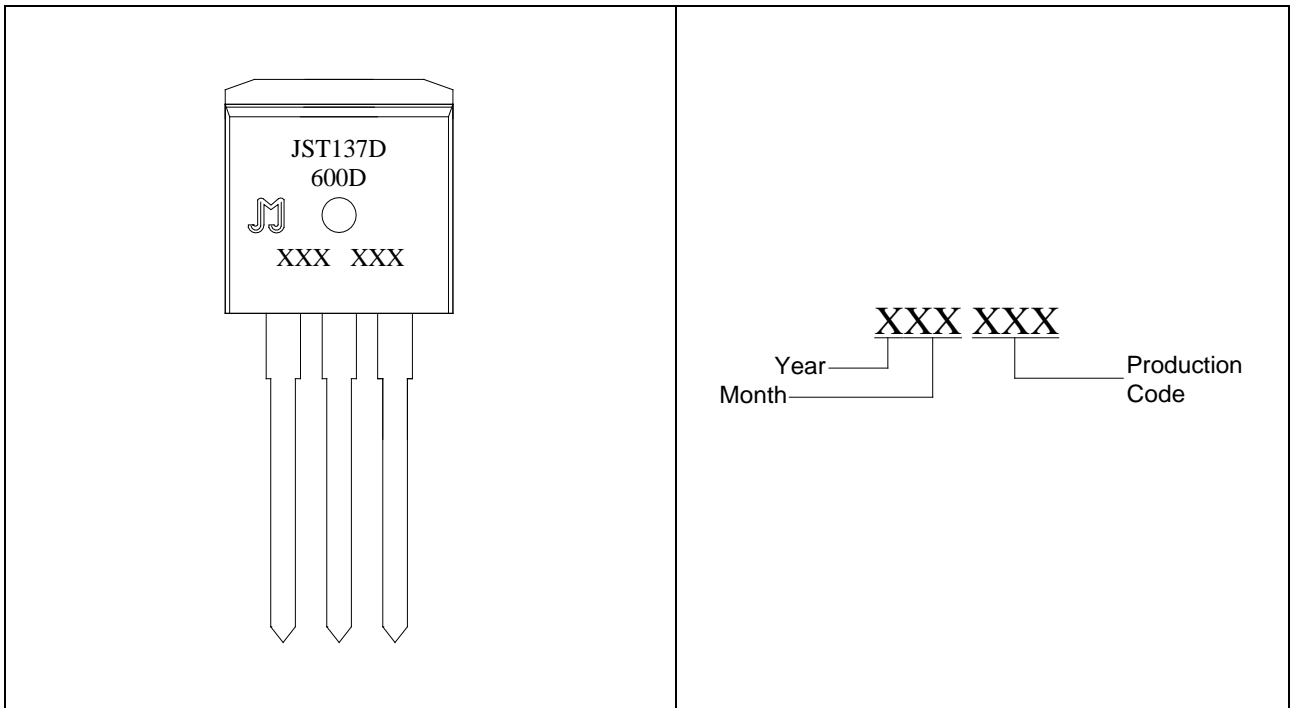
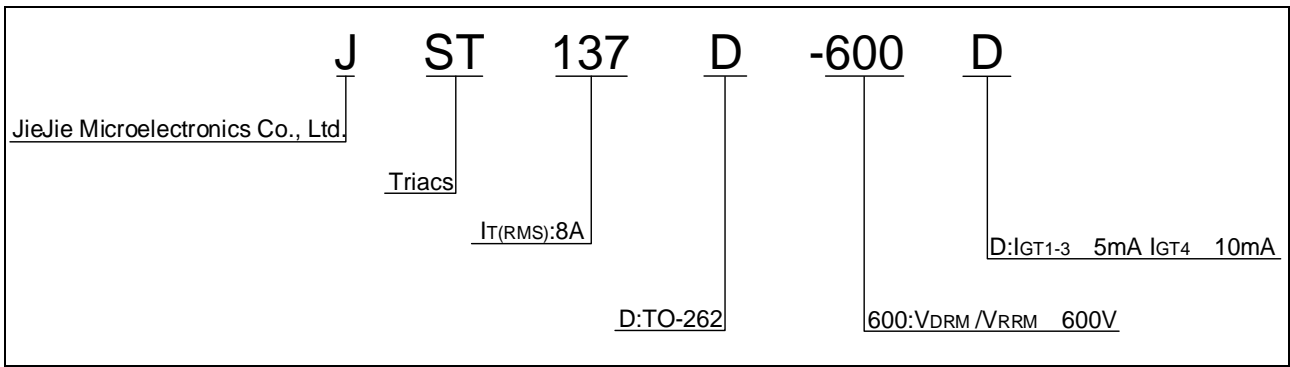
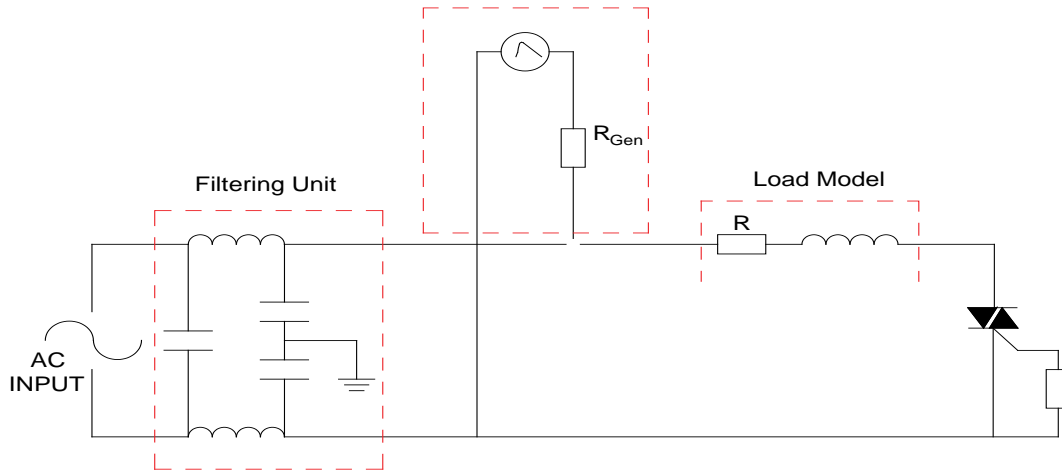


FIG.1 Maximum power dissipation versus RMS on-state current

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

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

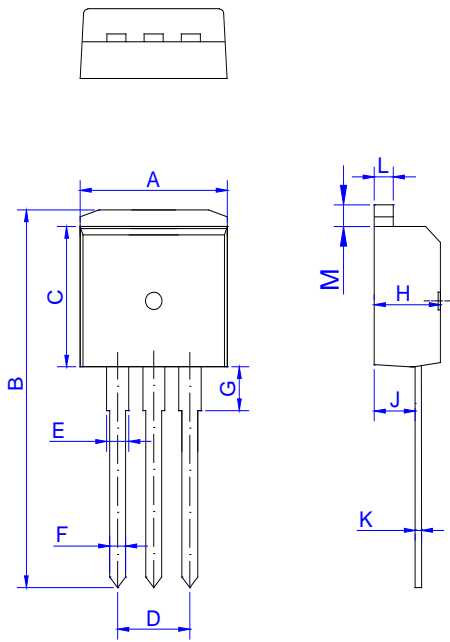
IEC61000-4-5 Standards
Surge Generator



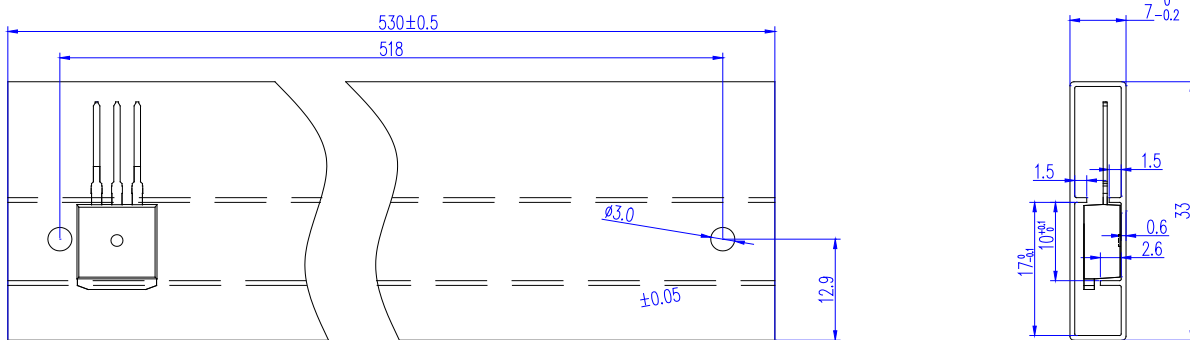
Order code	Voltage V_{DRM}/V_{RRM} (V)	IGT(mA)		Package	Base qty. (pcs)	Delivery mode
		-	-			
JST137D-600D	600	5	10	TO-262	50	Tube

Document Revision History

Date	Revision	Changes
------	----------	---------



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	9.95		10.20	0.392		0.402
B	23.85		24.05	0.939		0.947
C	9.40		9.60	0.370		0.378
D	4.95		5.25	0.195		0.207
E	1.35		1.40	0.053		0.055
F	0.80		0.85	0.031		0.033
G	2.70		3.40	0.106		0.134
H	4.45		4.55	0.175		0.179
J	2.20		2.60	0.087		0.102
K	0.48		0.52	0.019		0.020
L	1.30		1.35	0.051		0.053
M	1.20		1.50	0.047		0.059



PACKAGE	OUTLINE	TUBE (PCS)	INNER BOX (PCS)	PER CARTON
TO-262	TUBE	50	1,000	5,000

