



JST131V-600T 1A TRIAC

Rev.A.1.1

The JST131V-600T 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 SOT-223 is RoHS compliant.

Symbol	Value	Unit
$I_{T(RMS)}$	1	A

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 ≤ 98)		I _{T(RMS)}	1	A
Non repetitive surge peak on-state current (full cycle , t _p =20ms , T _j =25)		I _{TSM}	16.5	A
Non repetitive surge peak on-state current (full cycle , t _p =16.6ms , T _j =25)			18	
I ² t value for fusing (t _p =10ms , T _j =25)		I ² t	1.36	A ² s
Critical rate of rise of on-state current (I _G =2 I _{GT} , f=100Hz , T _j =125)	-	dI/dt	30	A/μs
	-		20	
Peak gate current (t _p =20μs , T _j =125)		I _{GM}	2	A
Average gate power dissipation (T _j =125)		P _{G(AV)}	0.5	W
Peak gate power		P _{GM}	5	W
Peak pulse voltage (T _j =25 ; non-repetitive,off-state;FIG.8)		V _{PP}	3.5	kV

(T_j=25 unless otherwise specified)

Symbol	Test Condition	Quadrant	Value	Unit
I _{GT}	V _D			

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

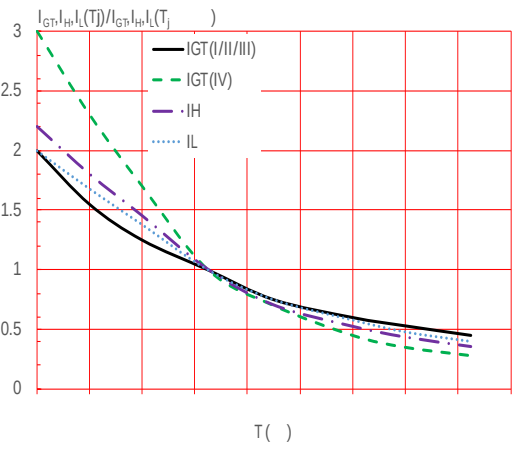


FIG.8 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards

Order code	Voltage V _{DRM} /V _{RRM} (V)	IGT(mA)	Package	Base qty. (pcs)	

Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	1.50	1.60	1.80	0.059	0.063	0.071
A1	0.01	0.06	0.10	0.001	0.002	0.004
B	2.90	3.00	3.10	0.114	0.118	0.122
B1	0.60	0.70	0.80	0.024	0.028	0.031
C	0.22	0.26	0.32	0.009	0.010	0.013
D	6.30	6.50	6.70	0.248	0.256	0.264
E	3.30	3.50	3.70	0.130	0.138	0.146
F	4.40			0.173		
F1	2.20			0.087		
G	0.50		1.00	0.020		0.039
H	1.50	1.75	2.00	0.059	0.069	0.079
J	6.70	7.00	7.30	0.264	0.276	0.287
K						

