JST131N2-600DS 1A TRIAC

Rev.A.1.1

DESCRIPTION:

The JST131N2-600DS triac is suitable for general purpose

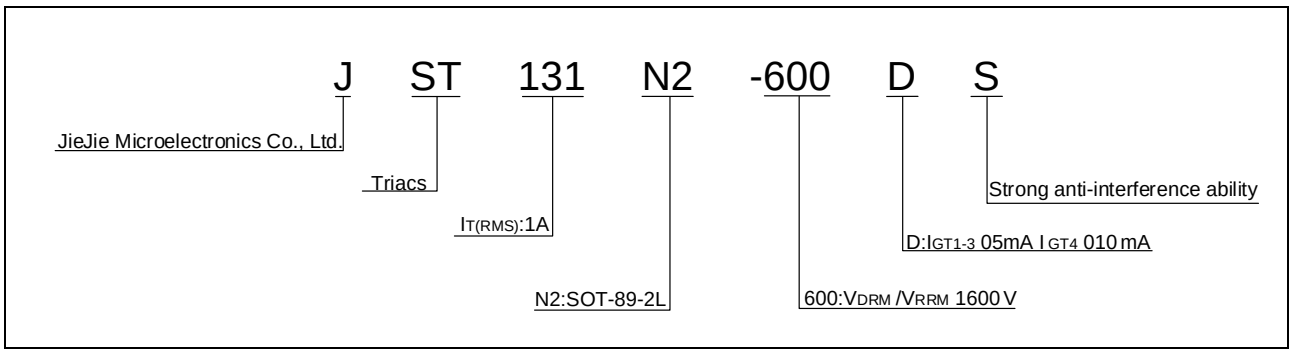
ELECTRICAL CHARACTERISTICS (T_j=25 unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	V_D=12V R_L=33	- -	MAX.	5	mA
				10	
V_{GT}		ALL	MAX.	1.3	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.	5	mA
				20	
I_H	I_T=50mA		MAX.	7	mA
dV/dt	V_D=400V Gate Open T_j=125		MIN.	350	V s
(dV/dt)c	(dI/dt)c=0.44A/ms, T_j=110		MIN.	3	9 V
t_{on}	I_G=20mA I_A=200mA I_R=20mA T_j=25		TYP.	2.5	s
t_{off}				25	

STATIC CHARACTERISTICS

Symbol	Parameter		Value(MAX .)	Unit
V_{TM}	I_{TM}=1.4A t_p=380 s	T_j=25	1.45	V
V_{TO}	Threshold voltage	T_j=125	0.96	V
R_D	Dynamic resistance	T_j=125	225	P
I_{DRM}	V_D=V_{DRM} V_R=V_{RRM}	T_j=25	5	A RM

ORDERING INFORMATION



MARKING

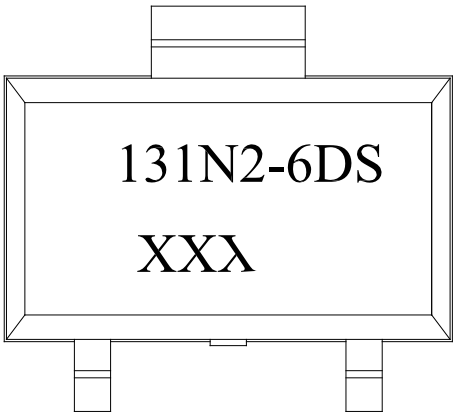
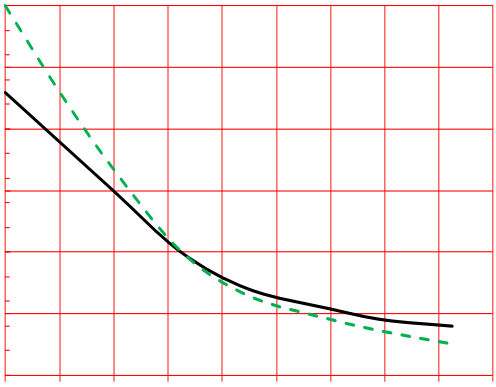


FIG.1: Maximum power dissipation versus RMS on-state current



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

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



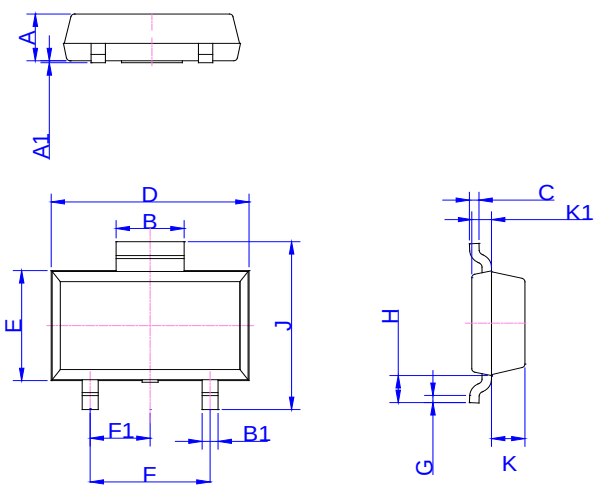
ORDERING INFORMATION

Order code	Voltage V_{DRM}/V_{RRM} (V)	IGT(mA)		Package	Base qty. (pcs)	Delivery mode
		- -				
JST131N2-600DS	600	5	10	SOT-89-2L	4,000	Tape & Reel

Document Revision History

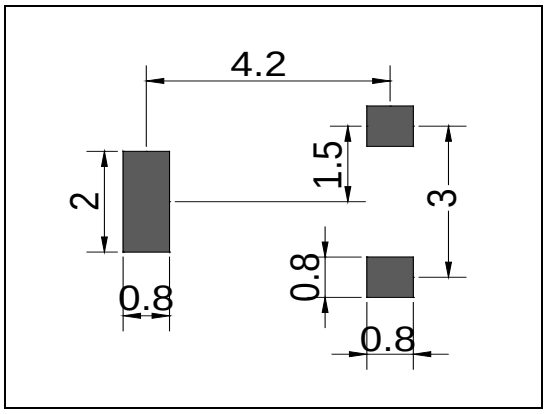
Date	Revision	Changes
Jan.23, 2024	A.1.0	Last updated

PACKAGE MECHANICAL DATA



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	1.3	1.4	1.5	0.051	0.055	0.059
A1	0.01	0.06	0.10	0.001	0.002	0.004
B	1.6	1.7	1.8	0.063	0.067	0.071
B1	0.3	0.4	0.5	0.012	0.016	0.020
C	0.22	0.254	0.32	0.009	0.010	0.013
D	4.75	4.95	5.15	0.187	0.195	0.203
E	2.90		3.30	0.114		0.130
F	2.80		3.20	0.110		0.126
F1	1.40		1.60	0.055		0.063
G	0.20	0.30	0.40	0.008	0.012	0.016
H	0.58	0.78	0.98	0.023	0.031	0.039
J	4.30	4.50	4.70	0.169	0.177	0.185
K	0.80		1.00	0.031		0.039
K1	0.50		0.60	0.020		0.024

FOOTPRINT SOT-89-2L (dimensions in mm)



DELIVERY MODE



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
E	1.65	1.75	1.85	0.065	0.069	0.073
F	5.45	5.50	5.55	0.215	0.217	0.219
P2	1.90	2.00	2.10	0.075	0.079	0.082
D	-	1.50	1.60	-	0.059	0.063
D1	1.50			0.059		
P0	3.90	4.00	4.10	0.154	0.157	0.161
10P0	39.80	40.00	40.20	1.567	1.575	1.583
W			12.30			0.482
P	7.90	8.00	8.10	0.311	0.315	0.319
A0	5.20	5.30	5.40	0.204	0.208	0.212
B0	4.80	4.90	5.00	0.188	0.192	0.196
K0	1.75	1.85	1.95	0.069	0.073	0.076
t	0.20	0.25	0.30	0.008	0.010	0.012
	3°		5°	3°		5°