

Peak pulse voltage ($T_j=25$; non-repetitive, off-state; FIG.7)	V_{PP}	3.5	kV
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ELECTRICAL CHARACTERISTICS ($T_j=25$ unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	$V_D=12V$ $R_L=33\Omega$	- -	MAX.	5	mA
				10	
V_{GT}		ALL	MAX.	1.3	V
V_{GD}	$V_D=V_{DRM}$ $T_j=125$ $R_L=3.3k\Omega$	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 $T_j=110$		MIN.	120	V/ μs
$(dV/dt)_c$	$(dI/dt)_c=0.44A/ms$, $T_j=110$		MIN.	3	V/ μs
t_{on}	$I_G=20mA$ $I_A=200mA$ $I_R=20mA$ $T_j=25$		TYP.	2.5	μs
t_{off}				25	

STATIC CHARACTERISTICS

Symbol	Parameter	Value(MAX.)	Unit
		1.45	V

ORDERING INFORMATION

J	ST	131	U	-600	D	-/
JieJie Microelectronics Co., Ltd.	Triacs	$I_{T(RMS)}:1A$	U:TO-92	600: $V_{DRM}/V_{RRM} \geq 600V$	D: $I_{GT1-3} \leq 5mA$ $I_{GT4} \leq 10mA$	Blank: Bulk Pack -TR: Tape & Reel

MARKING

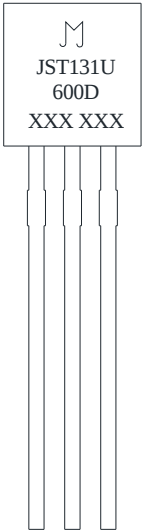
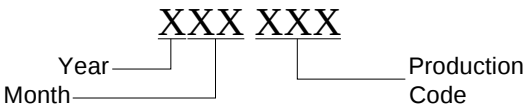
	
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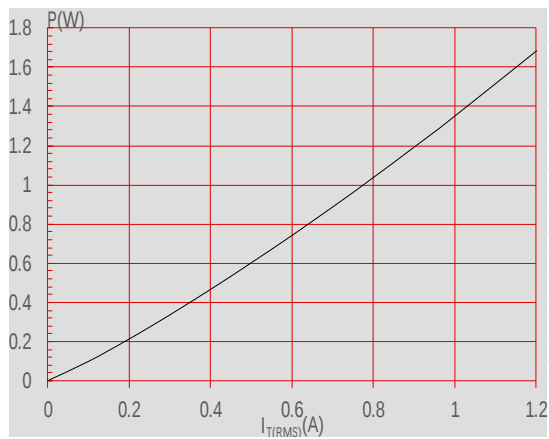
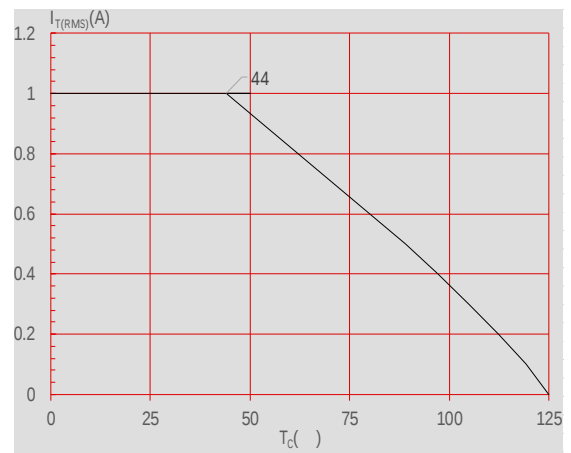
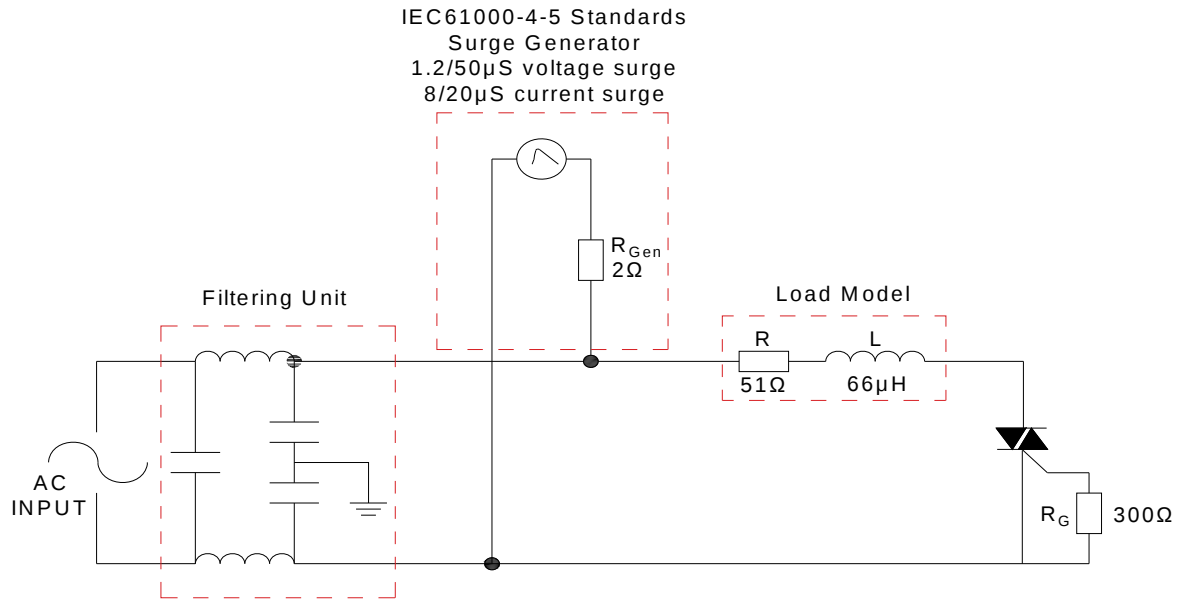
FIG.1: Maximum power dissipation versus RMS on-state current**FIG.3:** Surge peak on-state current versus number of cycles**FIG.2:** RMS on-state current versus case temperature**FIG.4:**

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





ORDERING INFORMATION

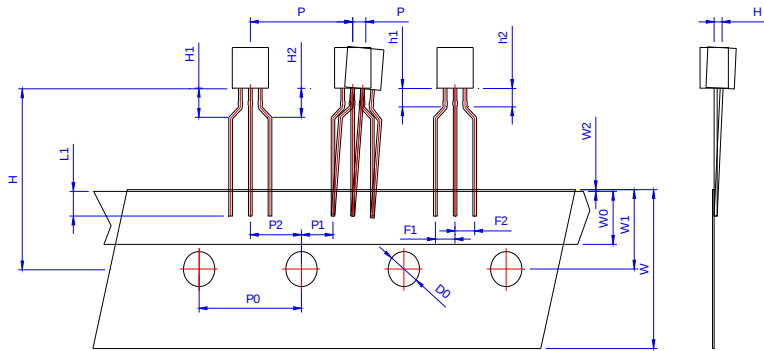
Order code	Voltage $V_{\text{DRM}}/V_{\text{RRM}}$ (V)	IGT(mA)		Package	Base qty. (pcs)	Delivery mode
		- -				
JST131U-600D	600	5	10	TO-92	1,000	Bulk Pack
JST131U-600D-TR					2,000	Tape & Reel

Document Revision History

Date	Revision	Changes
Apr.14, 2023	A.1.0	Last updated
Mar.26, 2025	A.2.0	Renew PACKAGE MECHANICAL DATA
Sept.28, 2025	A.2.1	Revise PACKAGE MECHANICAL DATA

DELIVERY MODE

PACKAGE	OUTLINE	BAG (PCS)	INNER BOX (PCS)	CARTON BOX (PCS)
TO-92	Bulk Pack	1,000	10,000	50,000



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
P	12.40	12.70	13.00	0.488	0.500	0.512
P0	12.40	12.70	13.00	0.488	0.500	0.512
P1	3.55	3.85	4.15	0.140	0.152	0.163
P2	5.95	6.35	6.75	0.233	0.250	0.265
P	-1.00	0	1.00	-0.039	0	0.039
F1 F2	2.30	2.50	2.70	0.090	0.098	0.106
F1-F2	-0.10	0	0.10	-0.004	0	0.004
W	17.50	18.00	19.00	0.689	0.709	0.748
W0	5.50	6.00	6.50	0.217	0.236	0.256
W1	8.50	9.00	9.50	0.335	0.354	0.374
W2			1.00			0.039
D0	3.80	4.00	4.20	0.150	0.157	0.165
H	-1.00	0	1.00	-0.039	0	0.039
L1	2.50			0.098		
H	18.00	19.00	20.00	0.709	0.748	0.787
H1 H2			3.00			0.119
H1-H2	-0.50		0.50	-0.020		0.020
h1 h2			1.00			0.040
h1-h2	-0.20		0.20	-0.008		0.008

PACKAGE	OUTLINE	REEL (PCS)	INNER BOX (PCS)	CARTON BOX (PCS)
TO-92	Tape & Reel	/	2,000	20,000

