

BT131-800D 1A TRIAC

Rev.A.1.1

DESCRIPTION:

The BT131-800D 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-89-2L is RoHS compliant.

MAIN FEATURES

ABSOLUTE MAXIMUM RATINGS

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 ($T_j=25^\circ\text{C}$)	V_{DRM}	800	V

ELECTRICAL CHARACTERISTICS (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

$I_L = I_G = 1 \text{ YR } \check{Z} \tilde{n} \text{ B } \bullet T \hat{U} \hat{A} ! \text{œ } ! 1 \bullet \hat{O}$

MARKING

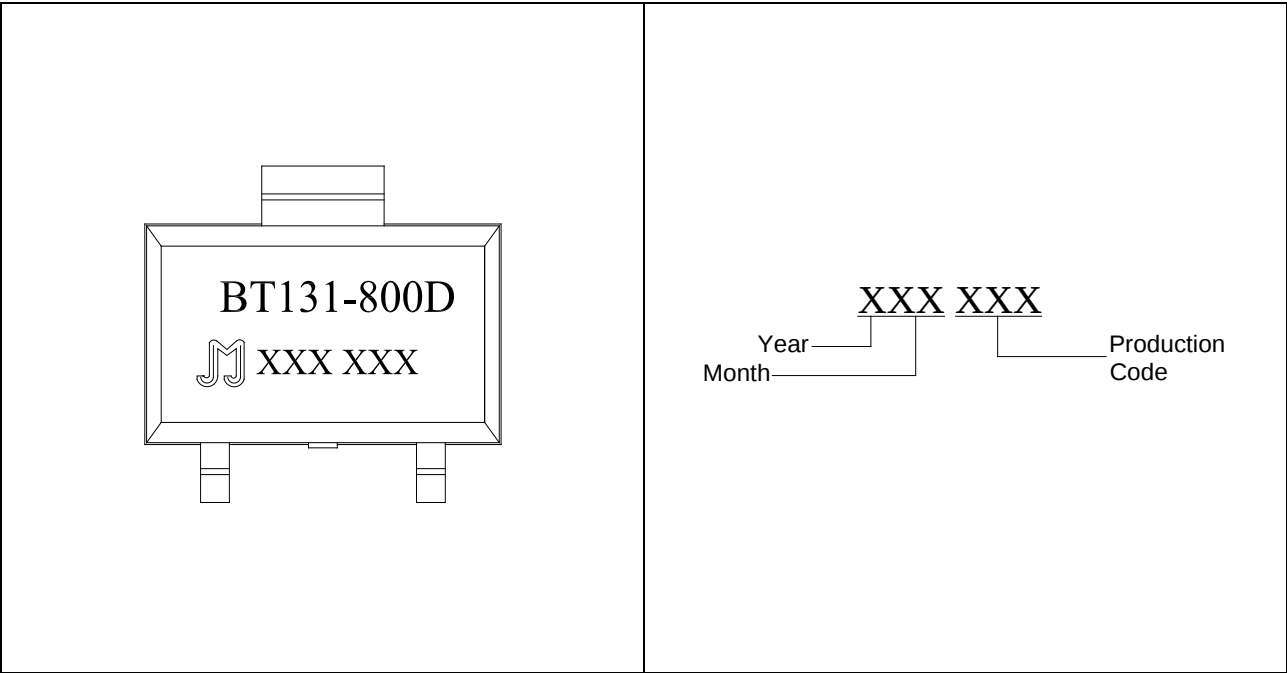


FIG.1: Maximum power dissipation versus RMS on-state current



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

FIG.3: RMS on-state current versus ambient temperature (printed circuit board FR4, copper thickness: P (full cycle)

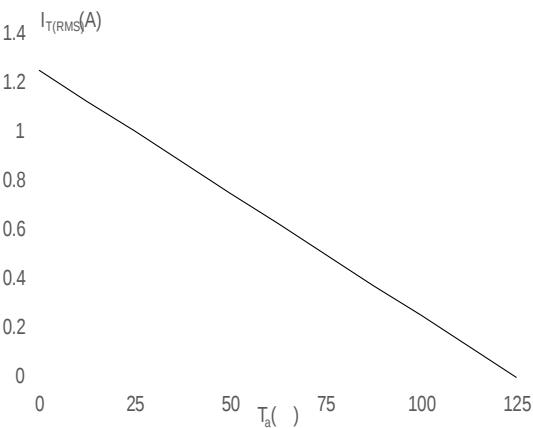


FIG.5: On-state characteristics

FIG.4: Surge peak on-state current versus number of cycles

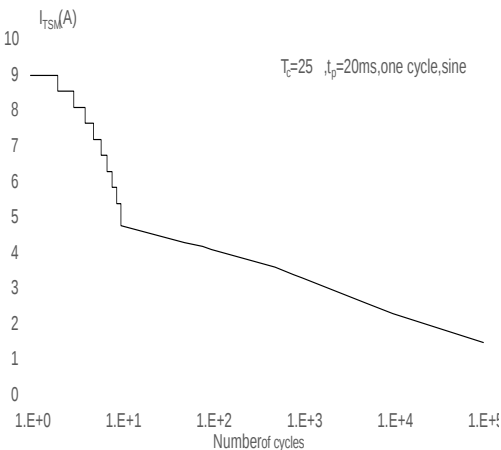
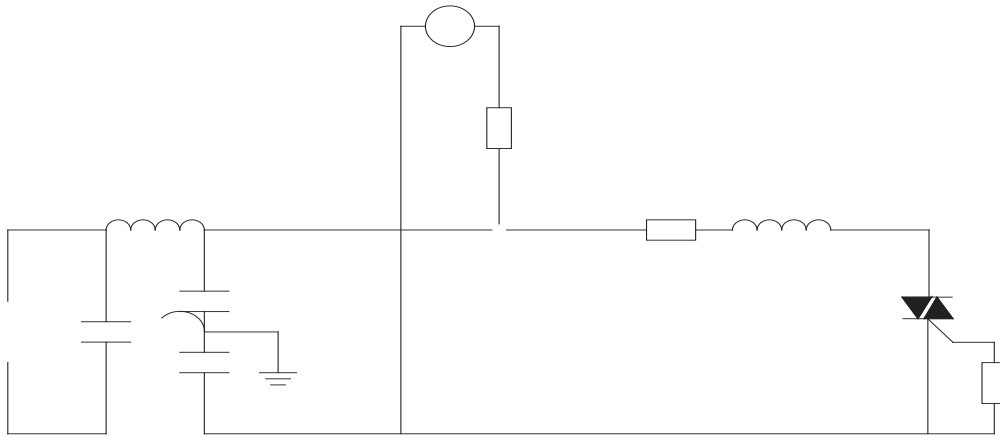
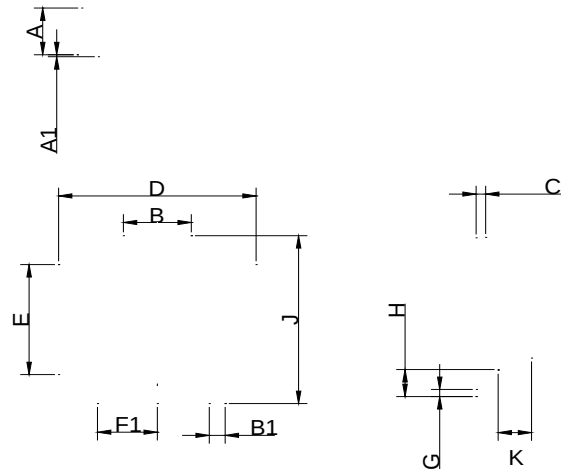


FIG.6: Non-repetitive surge peak on-state current for a sinusoidal pulse with width $t_p < 20\text{ms}$, and corresponding value of I^2t (- : $dI/dt < 50 \text{ A}/\mu\text{s}$ V- : $dI/dt < 30 \text{ A}/\mu\text{s}$)V

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



PACKAGE MECHANICAL DATA



DELIVERY MODE

Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
E	1.65	1.75	1.85			
F	5.45	5.50	5.55			
P2	1.90	2.00	2.10			
D	-	1.50	1.60			
D1	1.50					
P0	3.90	4.00	4.10			
- 10P0	39.80	40.00	40.20			
W						
P						
A0						
B0						
K0						
t						

Information furnished in this document is believed to be accurate and reliable. However, Jiangsu JieJie Microelectronics Co., Ltd. assumes no responsibility for the consequences of use without consideration for such information nor use beyond it. Information mentioned in this document is subject to change without notice, apart from that when an agreement is signed, Jiangsu JieJie complies with the agreement.

Products and information provided in this document have no infringement of patents. Jiangsu JieJie assumes no responsibility for any infringement of other rights of third parties which may result from the use of such products and information. This document supersedes and replaces all information previously supplied.

is a registered trademark of Jiangsu JieJie Microelectronics Co., Ltd02nTJ 0 Tc 0 Tw i1532 <