



JST131V-800T 1A TRIAC

Rev.A.1.1

DESCRIPTION:

Th J ST131V-800T 1A TRIAC
 AC by Ita r ON / OFF b
 i
 t
 g d P
 SOT 23 1815 m .

MAIN FEATURES

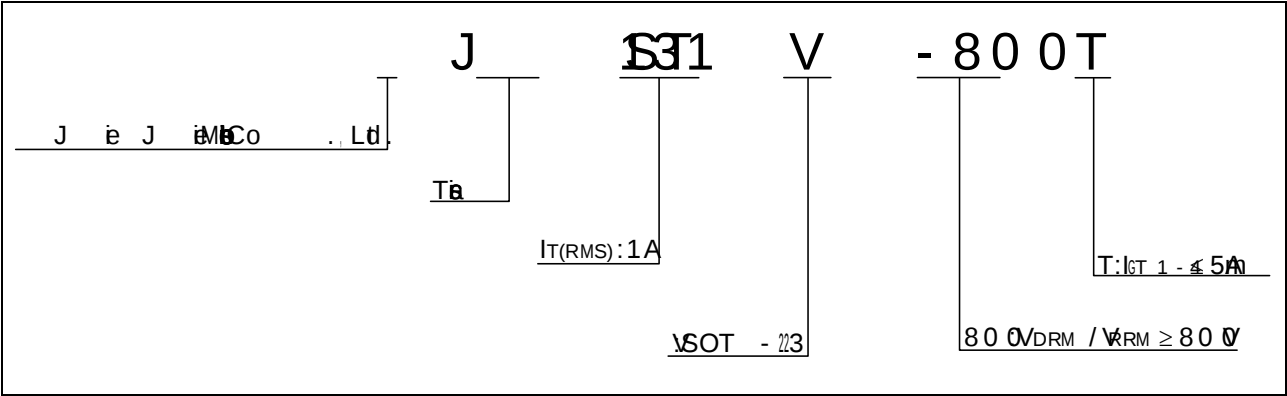
ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Value	Unit
Storage temperature	T_s	-40 ~ 150	
Operating temperature	T_j	-40 ~ 125	
Reverse blocking voltage (T _j = 25 °C)	V_{DRM}	800	V
Reverse repetitive voltage (T _j = 25 °C)	V_{RRM}	800	V
RMS current (T _j = 25 °C, c ≤ 98 °C)	$I_{T(RMS)}$	1	A
Non-repetitive surge current (T _j = 25 °C, p = 10 ms)	I_{TSM}	16.5	A
Non-repetitive surge current (T _j = 25 °C, p = 16.6 ms)		18	
Surge current (T _j = 25 °C, p = 10 ms)	$I^2 t$	1.36	A ² s
Clamping voltage (I _G = 2 × I _{GT} , f = 100 Hz, T _j = 125 °C)	-	30	A/μs
	-	20	
Peak gate current (T _j = 25 °C, p = 10 μs)	I_{GM}	2	A
Average power dissipation (T _j = 25 °C)	$P_{G(AV)}$	0.5	W
Peak power dissipation	P_{GM}	5	W

ELECTRICAL CHARACTERISTICS

Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	$V_D=12V$ $R_L=33\Omega$	ALL	MAX .	5	μA
V_{GT}		ALL	MAX .	1.3	V
V_{GD}	$V_D=V_{DRM}$ $T_j=125^{\circ}C$ $R_L=3.3\Omega$	ALL	MIN .	0.2	V
I_L	$I_G=1 \times I_{GT}$	- -	MAX .	5	μA
				10	
I_H	$I_T=50 \mu A$		MAX .	5	μA
dV/dt	$V_D=54.0V$ $V_{GS}=5V$ $T_j=110^{\circ}C$		MIN .	20	V/ μs

ORDERING INFORMATION



MARKING

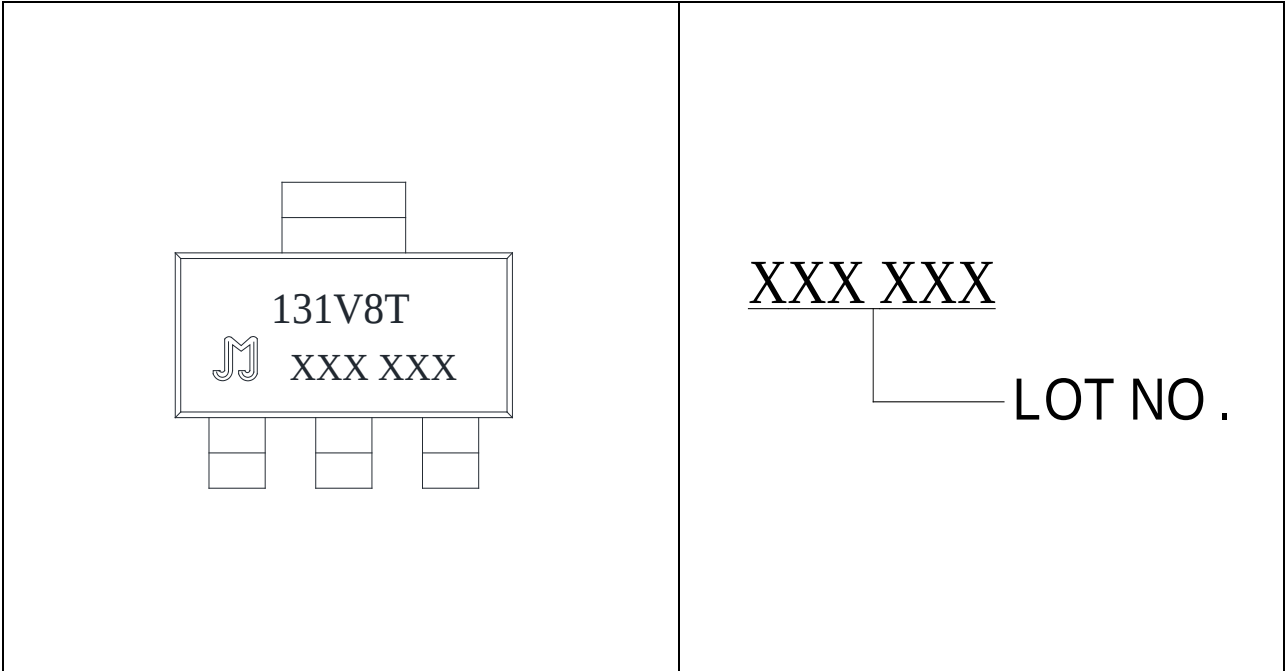


FIG.1: M_{RMS}

ϕ θ θ

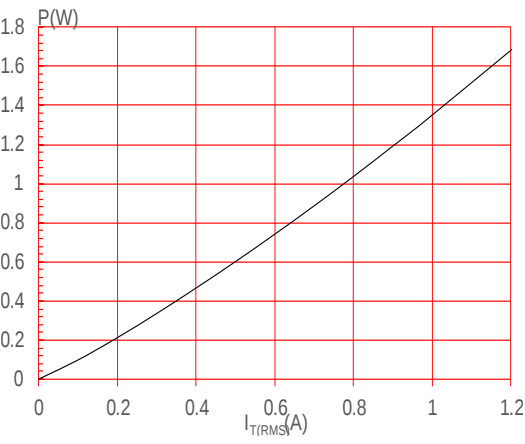


FIG.3: M_{RMS}

ϕ θ θ

thickness: 35 μ m)(full cycle)

FIG.2: M_{RMS}

ϕ

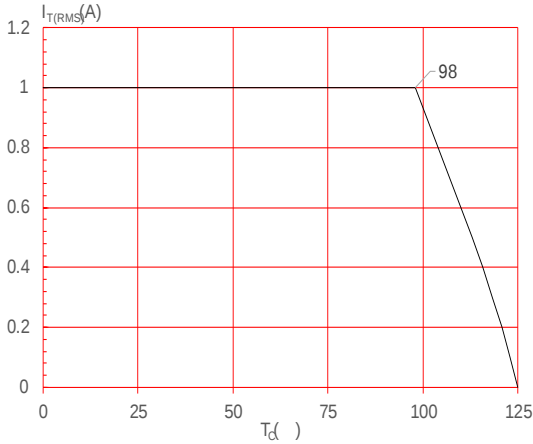
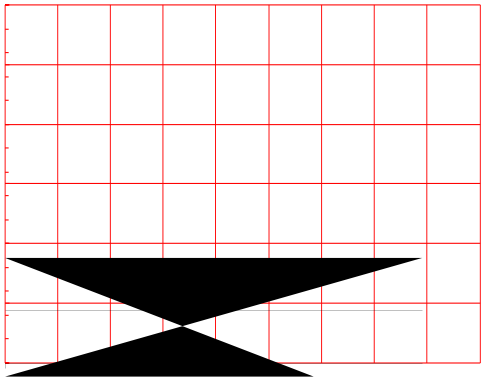


FIG.4: M_{RMS}

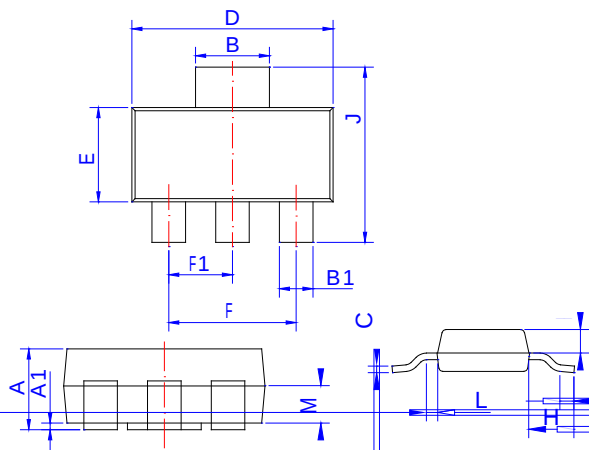
ϕ θ θ

FIG.7: Ring
type
pin



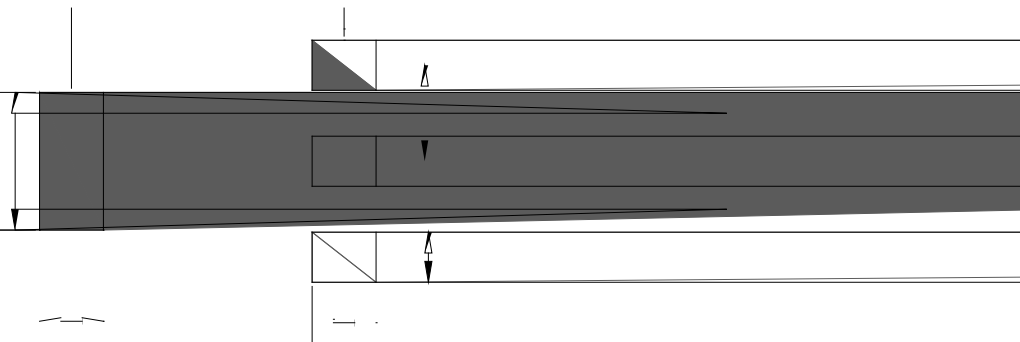


PACKAGE MECHANICAL DATA

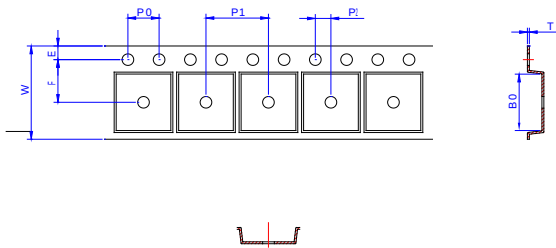


Ré	Dim					
	Min			Max		
	Min	Typ	Max	Min	Typ	Max
A	1.50	1.60	1.80	0.059	0.063	0.071
A1	0.01	0.06	0.10	0.000	0.002	0.004
B	2.90	3.00	3.10	0.114	0.118	0.122
B1	0.60	0.70	0.80	0.024	0.028	0.031
C	0.2	0.26	0.32	0.009	0.010	0.013
D	6.30	6.50	6.70	0.248	0.256	0.264
E	3.30	3.50	3.70	0.130	0.138	0.146
F	4.40		4.80	0.173		0.189
F1	2.20		2.40	0.087		0.094
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
	0.80		1.00	0.031		0.039
L	0.40		0.80	0.016		0.031
M	0.75		0.95	0.030		0.037

FOOTPRINTSOT223(dimensions in mm)



DELIVERY MODE



Ré	Dim					
	Min			Max		
	Min	Typ	Max	Min	Typ	Max
W	-		11.30	-		0.481
E	1.65	1.75	1.85	0.065	0.069	0.070
F	5.45	5.50	5.55	0.215	0.217	0.219
D0		1.55	1.60		0.061	0.063
D1		-	-			
P0	3.90	4.00	4.10	0.154	0.157	0.161
P1	7.90	8.00	8.10	0.311	0.315	0.319
P2	1.95	2.00	2.05	0.077	0.079	0.081
10P0	39.80	40.00	40.20	1.567	1.575	1.583
A0	6.85	6.95	7.05	0.269	0.273	0.276
B0	7.15	7.25	7.35	0.280	0.284	0.288
Ø	1.95	2.05	2.15	0.076	0.080	0.084
T	0.10	0.15	0.30	0.008	0.010	0.012

