

Power Inductor SMD (18.60 X 15.30 X 7.11 mm)

FEATURES

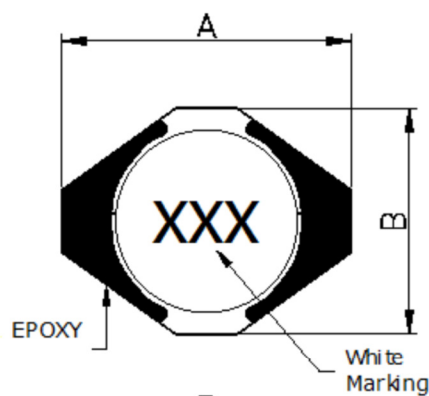
- High heat resistance, ideal for reflow
- High Current Capacity / Low DCR
- Halogen Free RoHS compliant
- Open Winding



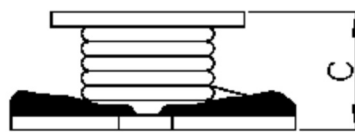
SPECIFICATION

Part No.	Inductance (μ H)	SRF (MHz) Typ.	DC Resistance Max. (Ω)	Rated DC Current (A) Typ. $\Delta L/L=10\%$ $\Delta T=40^\circ\text{C}$
TANB1807F-1R0M	1.0	80	0.009	20
TANB1807F-2R2M	2.2	80	0.014	16
TANB1807F-3R3M	3.3	60	0.018	14
TANB1807F-5R6M	5.6	40	0.020	12
TANB1807F-8R2M	8.2	30	0.029	10
TANB1807F-100M	10	30	0.031	10
TANB1807F-150M	15	22	0.036	8.0
TANB1807F-220M	22	20	0.047	7.0
TANB1807F-330M	33	15	0.066	5.5
TANB1807F-470M	47	9	0.086	4.5
TANB1807F-680M	68	8	0.130	3.5
TANB1807F-101M	100	7	0.190	3.0
TANB1807F-151M	150	6	0.250	2.6
TANB1807F-221M	220	5	0.380	2.4
TANB1807F-331M	330	4	0.560	1.9
TANB1807F-471M	470	3	0.850	1.4
TANB1807F-681M	680	2.5	1.100	1.2
TANB1807F-102M	1000	2	1.800	1.0

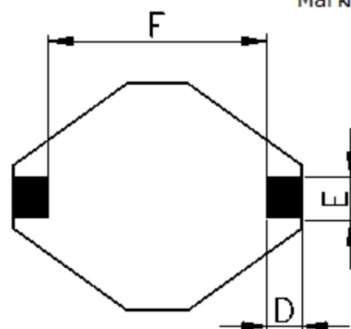
- Measurement frequency of Inductance value : at 100KHz, 0.25V
- Test equipment: CH1062A / CH1320
- Inductance tolerance: $\pm 20\%$



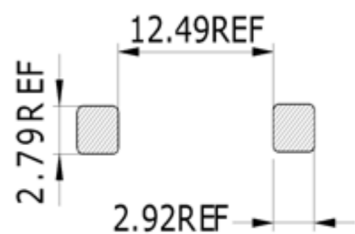
DIMENSION



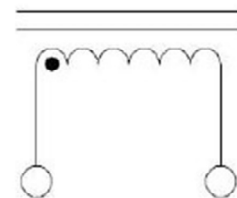
	mm
A	18.60 MAX
B	15.30 MAX
C	7.11 MAX
D	2.54 REF
E	2.54 REF
F	12.70 REF



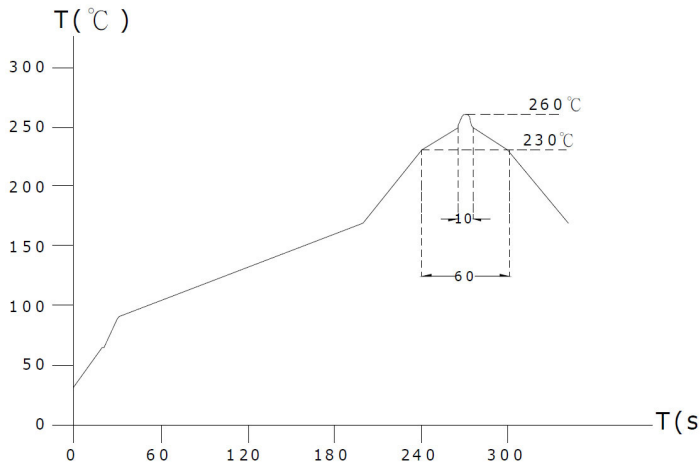
SOLDER PATTERN



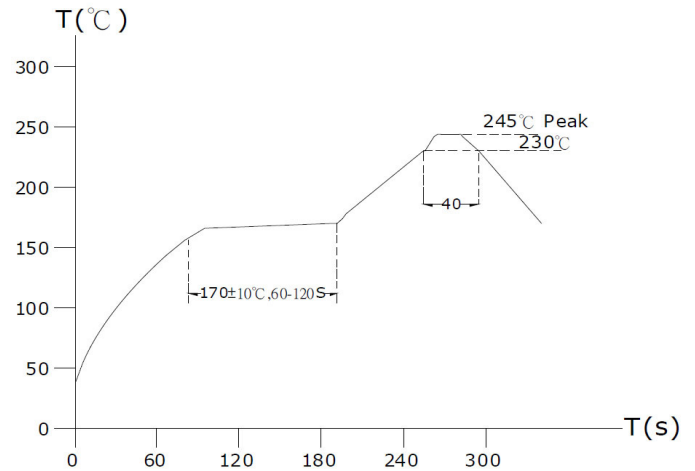
SCHEMATIC



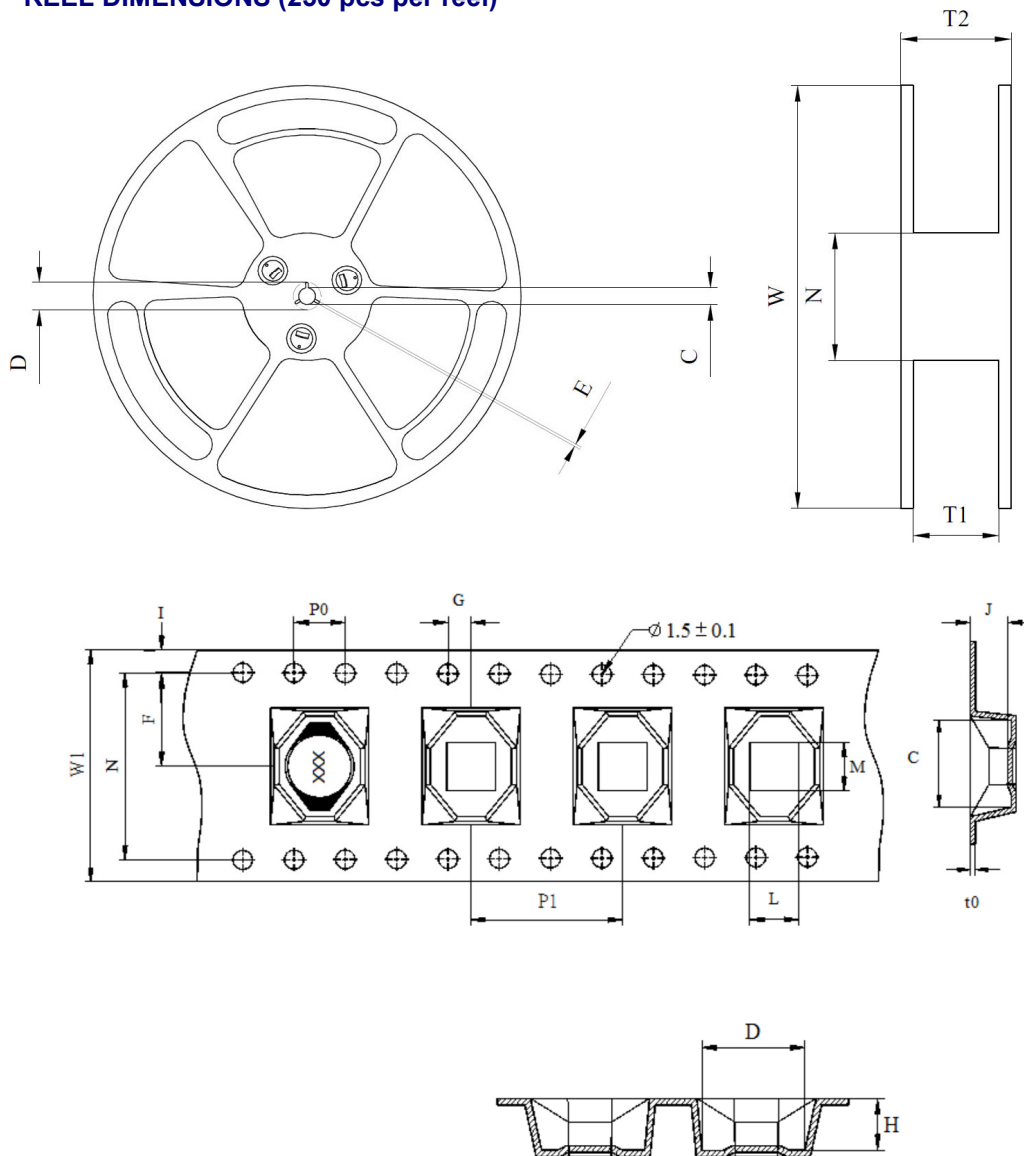
LEAD-FREE HEAT ENDURANCE TEST



LEAD-FREE RECOMMENDED REFLOW



REEL DIMENSIONS (250 pcs per reel)



	mm
W	330±1.5
D	21.5+0.5/-0
C	13+0.5/-0.2
T1	32.5+0.5/-0
N	100±1.5
T2	37.5±0.4
E	2.00±0.5

	mm
W1	32.00±0.3
I	1.75±0.1
F	14.20±0.1
P0	4.00±0.1
G	2.00±0.1
P1	20.00±0.1
N	28.40±0.1
C	18.60±0.1
t0	0.40±0.05
D	15.20±0.1
H	7.55±0.1
J	7.20±0.1
L	8.50±0.1
M	9.50±0.1

RELIABILITY TEST

1. Operating temperature range
-40 TO + 125°C (Includes temperature when the coil is heated)
2. External appearance
On visual inspection, the coil has no external defects.
3. Terminal strength
After soldering. Between copper plate and terminals of coil. Push in two directions of X.Y withstanding at below conditions.
Terminal should not peel off. (refer to figure at right)
5.0N 60 sec.
4. Insulating resistance
Over 100MΩ at 100V D.C. between coil and core.
5. Dielectric strength
No dielectric breakdown at 100V D.C. for 1 minute between coil and core.
6. Temperature characteristics
Inductance coefficient $(0\sim 2,000)\times 10^{-6}/^{\circ}\text{C}$ (-25~+80°C)
inductance deviation within $\pm 5.0\%$, after 96 hours
7. Humidity characteristics (Moisture Resistance)
Inductance deviation within $\pm 5\%$, after 96 hours in 90~95% relative humidity at $40 \pm 2^{\circ}\text{C}$ and 1 hour drying under normal condition.
8. Vibration resistance
Inductance deviation within $\pm 5\%$, after vibration for 1 hour. In each of three orientations at sweep vibration (10~55~10 Hz) with 1.5mm P-P amplitudes.
9. Shock resistance
Inductance deviation within $\pm 5\%$, after being dropped once with 981m/s^2 (100G) shock attitude upon a rubber block method shock testing machine, in three different orientations.
10. Resistance to Soldering Heat: 260°C, 10 seconds (See recommended reflow)
11. Storage environment
Temperature: 0°C~35°C; -40°C~125°C (after mounting on PCB)
Humidity Range: 50% ~ 70% RH
12. Use components within 12 months.
If 12 months or more have elapsed, check solderability before use.

