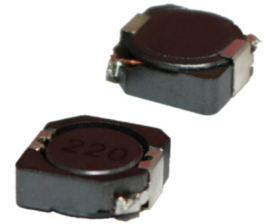


Power Inductor SMD (10.1 X 10.0 X 5.1 mm)

FEATURES

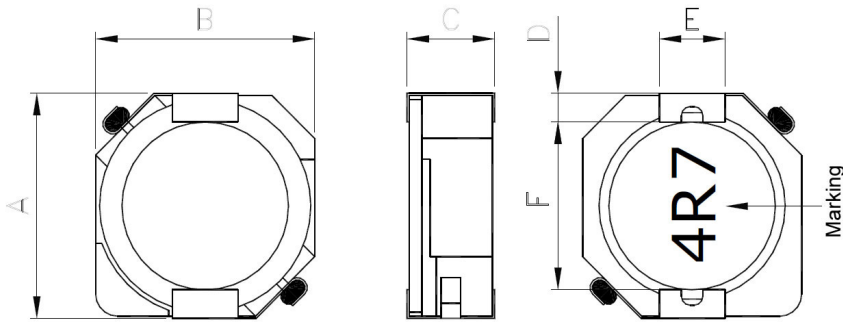
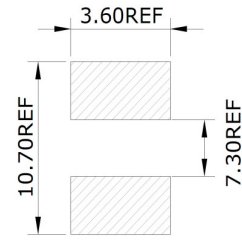
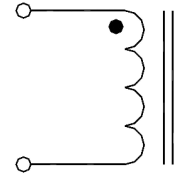
- Magnetic shielded
- High current
- Halogen Free RoHS compliant
- Low DCR



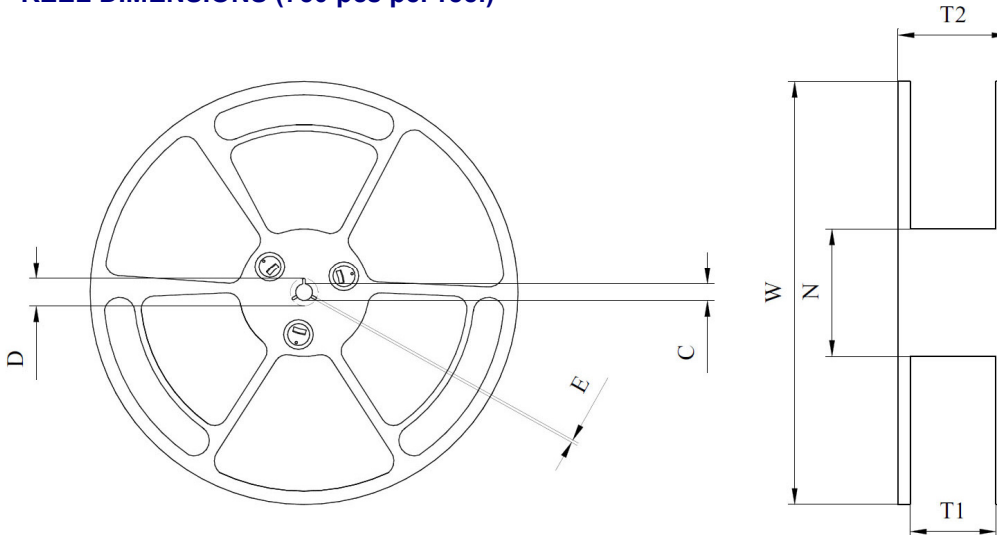
SPECIFICATION

Part No.	Inductance (μH)	Marking	DC Resistance (mΩ) Max.	Rated DC Current (A) Typ. ΔL/L=35% ΔT=40°C	
TPRH10D50F-1R5_	1.5	1R5	5.8	10.5	8.30
TPRH10D50F-2R2_	2.2	2R2	7.2	9.25	7.50
TPRH10D50F-3R3_	3.3	3R3	10.4	7.80	6.50
TPRH10D50F-4R7_	4.7	4R7	12.3	6.40	6.10
TPRH10D50F-6R8_	6.8	6R8	18	5.40	5.40
TPRH10D50F-8R2_	8.2	8R2	20	4.85	5.00
TPRH10D50F-100_	10	100	26	4.45	4.45
TPRH10D50F-120_	12	120	33	4.00	3.80
TPRH10D50F-150_	15	150	41	3.60	3.40
TPRH10D50F-180_	18	180	46	3.20	3.10
TPRH10D50F-220_	22	220	61	2.95	2.90
TPRH10D50F-270_	27	270	69	2.70	2.60
TPRH10D50F-330_	33	330	84	2.40	2.50
TPRH10D50F-390_	39	390	106	2.30	2.25
TPRH10D50F-470_	47	470	130	2.00	2.00
TPRH10D50F-560_	56	560	149	1.90	1.90
TPRH10D50F-680_	68	680	201	1.65	1.60
TPRH10D50F-820_	82	820	227	1.50	1.45
TPRH10D50F-101_	100	101	253	1.35	1.35
TPRH10D50F-121_	120	121	303	1.28	1.18
TPRH10D50F-151_	150	151	370	1.12	1.10
TPRH10D50F-181_	180	181	419	1.04	1.00
TPRH10D50F-221_	220	221	500	0.94	0.94
TPRH10D50F-271_	270	271	672	0.84	0.80
TPRH10D50F-331_	330	331	812	0.75	0.73
TPRH10D50F-391_	390	391	953	0.70	0.70
TPRH10D50F-471_	470	471	1290	0.60	0.54
TPRH10D50F-561_	560	561	1430	0.54	0.52
TPRH10D50F-681_	680	681	1600	0.52	0.51
TPRH10D50F-821_	820	821	1770	0.50	0.48
TPRH10D50F-102_	1000	102	1990	0.48	0.42

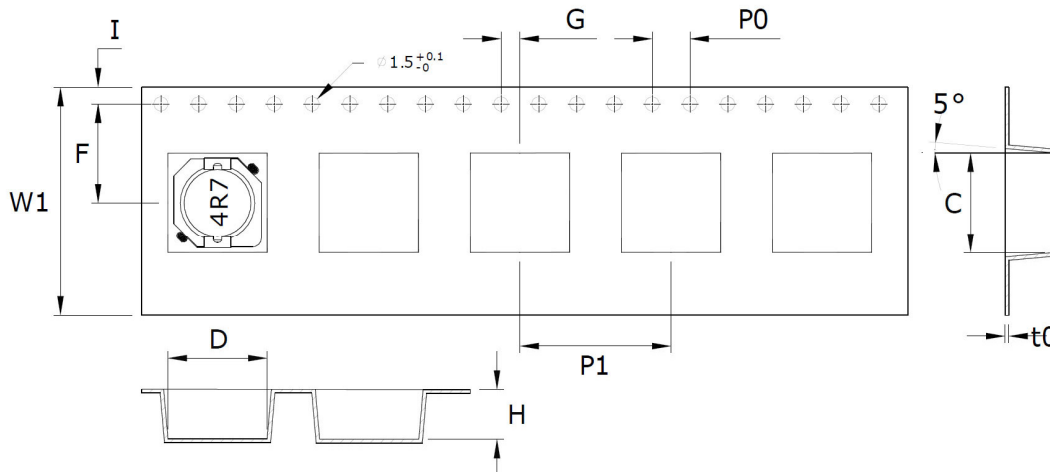
- Inductance tolerance: Letter at end of part number N = ±30% ; M = ±20%
- Measurement frequency of Inductance value : at 100KHz, 0.25V
- Test equipment: CH1062A / CH1320

DIMENSIONS

SOLDER PATTERN

SCHEMATIC


	A	B	C	D	E	F	
mm	10.10 ±0.30	10.00 ±0.30	5.10 Max	1.20 ±0.15	3.00 Typ	7.70 Typ	

REEL DIMENSIONS (750 pcs per reel)


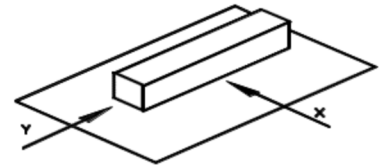
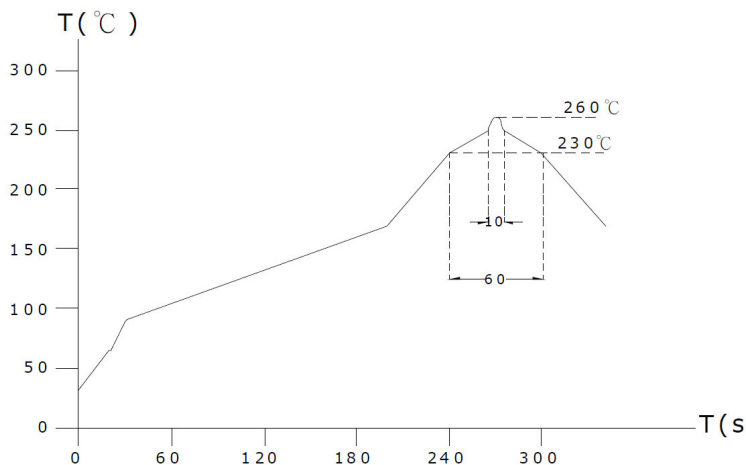
	mm
W	330±1.5
D	21.5+0.5/-0
C	13+0.5/-0.2
T1	24.5+0.5/-0
N	100±1.5
T2	29.5±0.4
E	2.00±0.5



	mm
W1	24.00±0.3
I	1.75±0.1
F	11.50±0.1
P0	4.00±0.1
G	2.00±0.1
P1	16.00±0.1
C	10.50±0.1
t0	0.35±0.05
D	10.50±0.1
H	5.20±0.1

RELIABILITY TEST

1. Operating temperature range
-40 TO + 105°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 recommend reflow)
11. Storage environment
Temperature: 0°C~35°C; -40°C ~ 105°C (after PCB) Humidity Range: 50% ~ 70% RH
12. Use components within 12 months.
If 12 months or more have elapsed, check solderability before use.


LEAD-FREE HEAT ENDURANCE TEST

LEAD-FREE RECOMMENDED REFLOW
