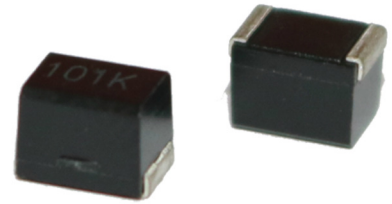


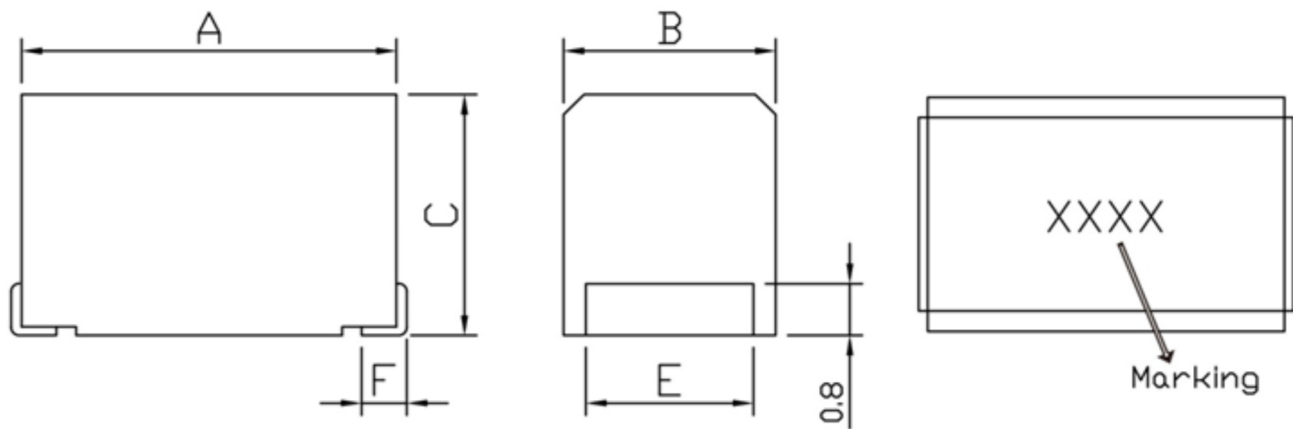
## Wire Wound Chip Inductor SMD 1812 (4.50 x 3.20 x 3.20 mm)

### FEATURES

- Highly Accurate Dimensions
- Halogen Free RoHS compliant

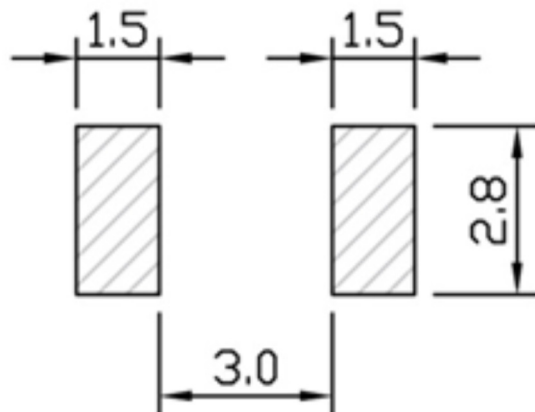


### DIMENSION

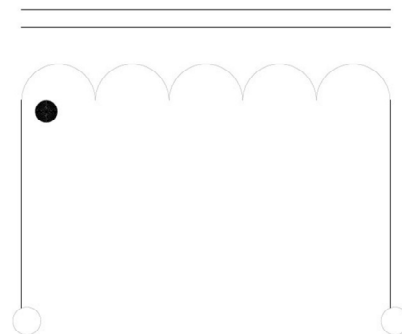


	A	B	C	E	F
mm	4.50 ±0.30	3.20 ±0.20	3.20 ±0.20	2.60 ±0.10	0.6 Ref.

### SOLDER PATTERN



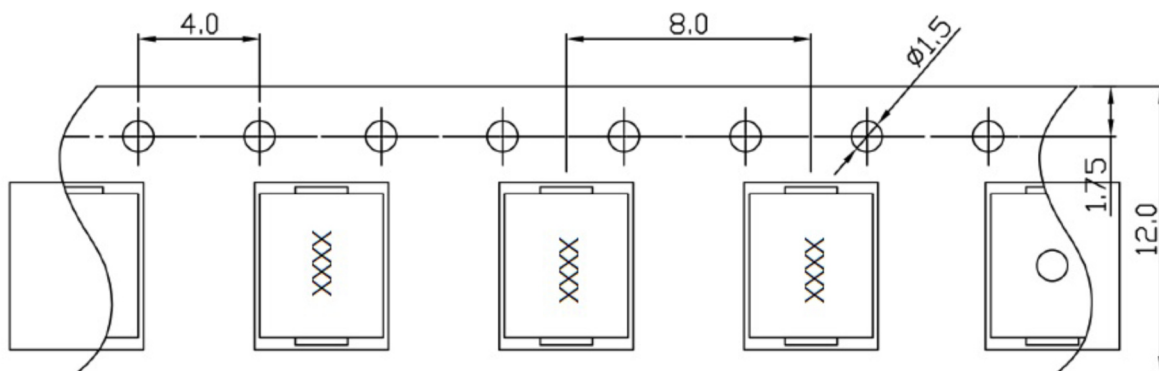
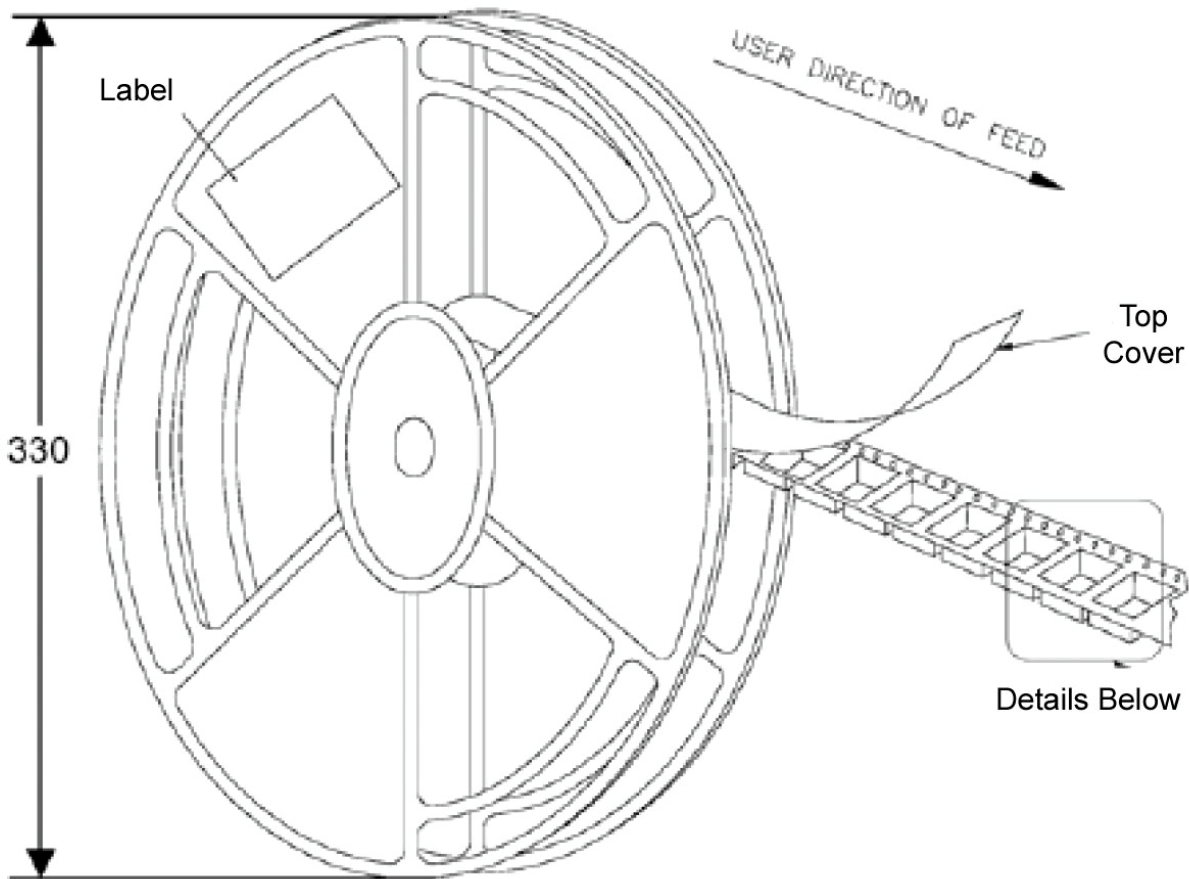
### SCHEMATIC



Part Number	L ( $\mu$ H)	Test Freq. (MHz)	Q Min.	SRF (MHz) Min.	RDC ( $\Omega$ ) Max	IDC (mA) max
TWL4532VF-R10_	0.10	25.2	35	300	0.18	800
TWL4532VF-R12_	0.12	25.2	35	280	0.20	770
TWL4532VF-R15_	0.15	25.2	35	250	0.22	730
TWL4532VF-R18_	0.18	25.2	35	220	0.24	700
TWL4532VF-R22_	0.22	25.2	40	200	0.25	665
TWL4532VF-R27_	0.27	25.2	40	180	0.26	635
TWL4532VF-R33_	0.33	25.2	40	165	0.28	605
TWL4532VF-R39_	0.39	25.2	40	150	0.30	575
TWL4532VF-R47_	0.47	25.2	40	145	0.32	545
TWL4532VF-R56_	0.56	25.2	40	140	0.36	520
TWL4532VF-R68_	0.68	25.2	40	135	0.40	500
TWL4532VF-R82_	0.82	25.2	40	130	0.45	475
TWL4532VF-1R0_	1.0	7.96	50	100	0.50	450
TWL4532VF-1R2_	1.2	7.96	50	80	0.55	430
TWL4532VF-1R5_	1.5	7.96	50	70	0.60	410
TWL4532VF-1R8_	1.8	7.96	50	60	0.65	390
TWL4532VF-2R2_	2.2	7.96	50	55	0.70	380
TWL4532VF-2R7_	2.7	7.96	50	50	0.75	370
TWL4532VF-3R3_	3.3	7.96	50	45	0.80	355
TWL4532VF-3R9_	3.9	7.96	50	40	0.90	330
TWL4532VF-4R7_	4.7	7.96	50	35	1.00	315
TWL4532VF-5R6_	5.6	7.96	50	33	1.10	300
TWL4532VF-6R8_	6.8	7.96	50	27	1.20	285
TWL4532VF-8R2_	8.2	7.96	50	25	1.40	270
TWL4532VF-100_	10	2.52	50	20	1.60	250
TWL4532VF-120_	12	2.52	50	18	2.00	225
TWL4532VF-150_	15	2.52	50	17	2.50	200
TWL4532VF-180_	18	2.52	50	15	2.80	190
TWL4532VF-220_	22	2.52	50	13	3.20	180
TWL4532VF-270_	27	2.52	50	12	3.60	170
TWL4532VF-330_	33	2.52	50	11	4.00	160
TWL4532VF-390_	39	2.52	50	10	4.50	150
TWL4532VF-470_	47	2.52	50	10	5.00	140
TWL4532VF-560_	56	2.52	50	9.0	5.50	135
TWL4532VF-680_	68	2.52	50	9.0	6.00	130
TWL4532VF-820_	82	2.52	50	8.0	7.00	120
TWL4532VF-101_	100	0.796	40	8.0	8.00	110
TWL4532VF-121_	120	0.796	40	6.0	8.00	110
TWL4532VF-151_	150	0.796	40	5.0	9.00	105
TWL4532VF-181_	180	0.796	40	5.0	9.50	105
TWL4532VF-221_	220	0.796	40	4.0	10.0	100
TWL4532VF-271_	270	0.796	40	4.0	12.0	92
TWL4532VF-331_	330	0.796	40	3.5	14.0	85
TWL4532VF-391_	390	0.796	40	3.0	18.0	80
TWL4532VF-471_	470	0.796	40	3.0	26.0	62
TWL4532VF-561_	560	0.796	40	3.0	30.0	50
TWL4532VF-681_	680	0.796	40	3.0	30.0	50
TWL4532VF-821_	820	0.796	40	2.5	35.0	30
TWL4532VF-102_	1000	0.252	20	2.5	40.0	30

- Specifications are measured using HP4285A
- Inductance tolerance option at end of part number: J:  $\pm 5\%$ ; K:  $\pm 10\%$ ; M:  $\pm 20\%$

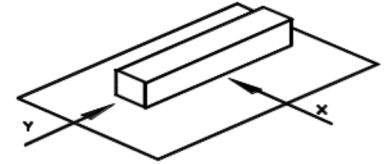
## REEL DIMENSIONS (500 pcs per reel)



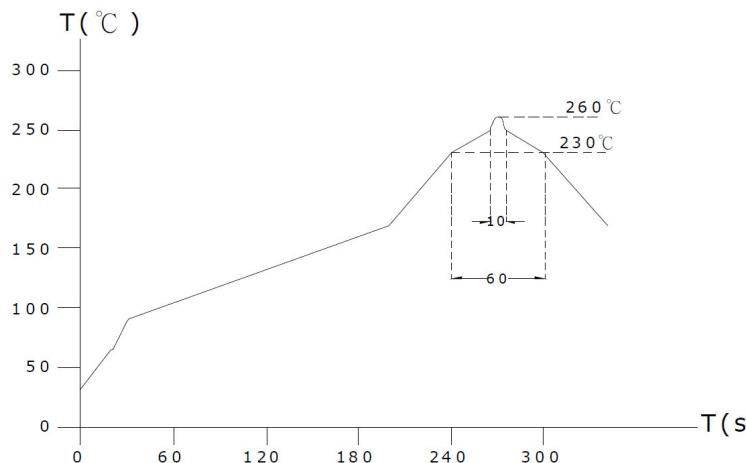
• Unit: mm

## 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)  
Applied force: 10N; Duration: 5 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  $981\text{m/s}^2$  (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 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.



## LEAD-FREE HEAT ENDURANCE TEST



## LEAD-FREE RECOMMENDED REFLOW

