

## WL5650V TYPE

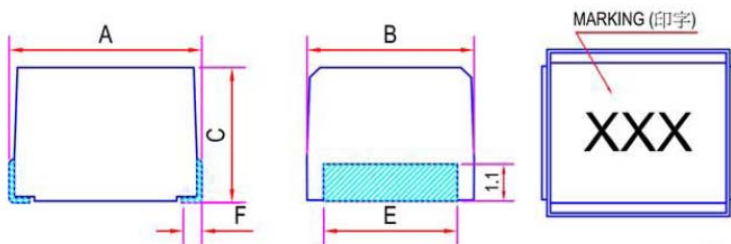
### ●FEATURE

1. Wire wound SMD inductors
2. Highly accurate dimensions and reliable

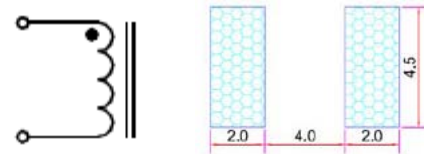
### ●Applications

1. Digital camera or small size LCD panel used
2. Hard Disk drives, and other electronic equipment

### ●Shape and Dimension



### ●Schematics and Land Patterns(mm)



A=5.60±0.30m/m ; B=5.00±0.30m/m ; C=4.00±0.30m/m ; E=4.00±0.10m/m ; F=0.70±0.10m/m

MARKING= Inductance value

### ●Specification

Note1. Measurement frequency of Inductance value : at electrical characteristics

Note2. Measurement ambient temperature of L, DCR and IDC : at 25°C

Note3. IDC : This indicates the value of current when the inductances is 10% lower than its initial value at D.C. superimposition or D.C. current when at  $\Delta t=30^{\circ}\text{C}$ , which is lower. ( $T_a=20^{\circ}\text{C}$ )

Note4. Inductance tolerance: J: ±5% ; K: ±10% ; M: ±20% (M,K:1.0uH~18uH ; K,J:22uH~10000uH)

Note5. Ordering Code: TYPE NAME: WL5650V

Main Inductance: 100 (10uH)

Tolerance : □ (see note 4).

Note6. Packaging: Taping ; Quantity: 1000 Pieces/reel

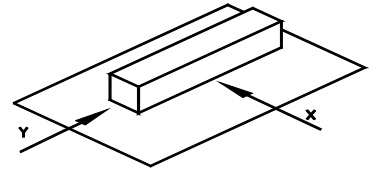
P/N	L ( $\mu$ H)	TEST FREQ. (MHz)	Q Min	SRF (MHz) Min	RDC ( $\Omega$ )Max	IDC (mA)Max
WL5650V-1R0□	1.0	7.96	10	95	0.030	1800
WL5650V-1R2□	1.2	7.96	10	70	0.035	1700
WL5650V-1R5□	1.5	7.96	10	55	0.04	1600
WL5650V-1R8□	1.8	7.96	10	47	0.05	1400
WL5650V-2R2□	2.2	7.96	10	42	0.06	1300
WL5650V-2R7□	2.7	7.96	10	37	0.07	1200
WL5650V-3R3□	3.3	7.96	10	34	0.08	1120
WL5650V-3R9□	3.9	7.96	10	32	0.09	1050
WL5650V-4R7□	4.7	7.96	10	29	0.11	950
WL5650V-5R6□	5.6	7.96	10	26	0.13	880
WL5650V-6R8□	6.8	7.96	10	24	0.15	810
WL5650V-8R2□	8.2	7.96	10	22	0.18	750
WL5650V-100□	10	2.52	10	19	0.21	690
WL5650V-120□	12	2.52	10	17	0.25	630
WL5650V-150□	15	2.52	10	16	0.30	580
WL5650V-180□	18	2.52	10	14	0.36	530
WL5650V-220□	22	2.52	10	13	0.43	480
WL5650V-270□	27	2.52	10	11.5	0.52	440
WL5650V-330□	33	2.52	10	10.5	0.62	400
WL5650V-390□	39	2.52	10	9.5	0.72	370
WL5650V-470□	47	2.52	10	8.5	0.85	340
WL5650V-560□	56	2.52	10	7.8	1.00	310
WL5650V-680□	68	2.52	10	7.0	1.20	290
WL5650V-820□	82	2.52	10	6.4	1.40	270
WL5650V-101□	100	0.796	20	6.0	1.60	250
WL5650V-121□	120	0.796	20	5.4	1.90	230
WL5650V-151□	150	0.796	20	4.8	2.20	210
WL5650V-181□	180	0.796	20	4.4	2.80	190
WL5650V-221□	220	0.796	20	3.9	3.40	170
WL5650V-271□	270	0.796	20	3.6	4.20	155
WL5650V-331□	330	0.796	20	3.2	4.90	140
WL5650V-391□	390	0.796	20	2.9	5.80	130
WL5650V-471□	470	0.796	20	2.6	7.00	120
WL5650V-561□	560	0.796	20	2.4	8.50	110
WL5650V-681□	680	0.796	20	2.2	10	100

P/N	L ( $\mu$ H)	TEST FREQ. (MHz)	Q Min	SRF (MHz) Min	RDC ( $\Omega$ )Max	IDC (mA)Max
WL5650V-821□	820	0.796	20	2.0	13	90
WL5650V-102□	1000	0.252	20	1.8	15	85
WL5650V-122□	1200	0.252	20	1.5	17	75
WL5650V-152□	1500	0.252	20	1.4	20	70
WL5650V-182□	1800	0.252	20	1.3	30	60
WL5650V-222□	2200	0.252	20	1.2	35	55
WL5650V-272□	2700	0.252	20	1.1	55	45
WL5650V-332□	3300	0.252	20	1.0	60	40
WL5650V-392□	3900	0.252	20	1.0	70	38
WL5650V-472□	4700	0.252	20	0.9	78	36
WL5650V-562□	5600	0.252	20	0.8	85	33
WL5650V-682□	6800	0.252	20	0.7	110	30
WL5650V-822□	8200	0.252	20	0.6	125	28
WL5650V-103□	10000	0.0796	15	0.5	150	25

## GENERAL CHARACTERISTICS

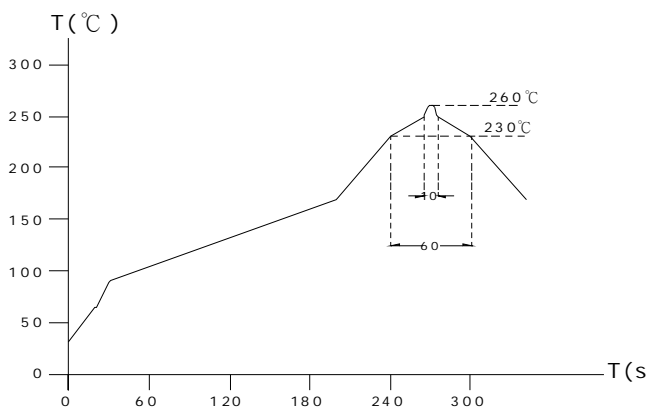
1. Operating temperature range: -40 TO + 105°C (Includes temperature when the coil is heated)
2. External appearance: On visual inspection, the coil has no external defects.
3. Terminal strength: After soldering. Between copper plate and terminals of coil. Push in two directions of X.Y withstanding at below conditions.

Terminal should not peel off. (refer to figure at right) 0.5kg.



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  $(0\sim2,000)\times 10^{-6}/^{\circ}\text{C}$   $(-25\sim+80^{\circ}\text{C})$ .
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  $(10\sim55\sim 10\text{ Hz})$  with 1.5mm P-P amplitudes.
9. Shock resistance: Inductance deviation within  $\pm 5\%$ , after being dropped once with 981m/s<sup>2</sup> (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 attached recommend reflow)
11. Storage environment: Storage condition: Temperature Range: 10°C ~ 35°C (Generally: 21°C ~ 31°C) , Humidity Range: 50% ~ 80% RH (Generally: 65% ~ 75%) ; Transportation condition: Temperature Range: -35°C ~ 85°C , Humidity Range: 50% ~ 95% RH
12. Use components within 12 months. If 12 months or more have elapsed, check solderability before use.
13. Reflow profile recommend:

Lead-free heat endurance test



Lead-free the recommended reflow condition

