SCOPE：

This specification applies to the current type Radial Leaded Inductor for VLU-1415-SERIES

PRODUCT INDENTIFICATION

VLU- 1415 - 102 K

① ② ③ ④

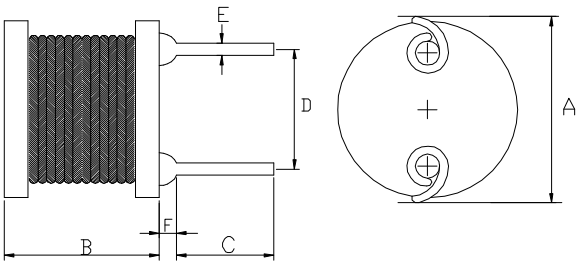
① Product Code

② Dimensions Code

③ Inductance Code

④ Tolerance Code

(1) SHAPES AND DIMENSIONS



A:	**15.5 Max.**	**mm**
B:	**15.5 Max.**	**mm**
C:	**15.0±2.0**	**mm**
D:	**7.5±0.5**	**mm**
E:	**φ1.0±0.1**	**mm**
F:	**3.0 Max.**	**mm**

(2) ELECTRICAL SPECIFICATIONS

SEE TABLE 1

TEST INSTRUMENTS

L : HP 4284A PRECISION LCR METER (or equivalent)

RDC : CHROMA MODEL 16502 MILLIOHMMETER (or equivalent)

(3) CHARACTERISTICS

(3)-1 Ambient temperature ……..... ＋60℃ Max.

(3)-2 Operate temperature range ..... －40℃～＋125℃

(Including self temp. rise)

(3)-3 Storage temperature range ..... －40℃～＋125℃

TABLE 1

RI HENGQIANG PT/NO.	Inductance L(μH)	Percent Tolerance	Test Frequency	Resistance RDC(Ω)Max.	Rated DC Current	
					IDC1(A)	IDC2(A)
VLU-1415-100□	10	M	100kHz/0.25V	17 m	14.0	6.7
VLU-1415-120□	12	K,M	100kHz/0.25V	19 m	12.0	6.6
VLU-1415-150□	15	K,M	100kHz/0.25V	21 m	10.0	6.5
VLU-1415-220□	22	K,M	100kHz/0.25V	26 m	8.8	5.8
VLU-1415-270□	27	K,M	100kHz/0.25V	28 m	8.3	5.3
VLU-1415-330□	33	K,M	100kHz/0.25V	34 m	7.8	5.2
VLU-1415-390□	39	K,M	100kHz/0.25V	38 m	7.3	5.1
VLU-1415-470□	47	K,M	100kHz/0.25V	46 m	6.7	4.6
VLU-1415-560□	56	K,M	100kHz/0.25V	51 m	6.2	4.5
VLU-1415-680□	68	K,M	100kHz/0.25V	55 m	5.7	4.3
VLU-1415-820□	82	K,M	100kHz/0.25V	58 m	5.2	4.2
VLU-1415-101□	100	K,M	100kHz/0.25V	75 m	4.6	3.4
VLU-1415-121□	120	K,M	100kHz/0.25V	0.100	4.2	3.1
VLU-1415-151□	150	K,M	100kHz/0.25V	0.125	3.7	2.9
VLU-1415-181□	180	K,M	100kHz/0.25V	0.141	3.5	2.7
VLU-1415-221□	220	K,M	100kHz/0.25V	0.208	3.0	2.4
VLU-1415-271□	270	K,M	100kHz/0.25V	0.240	2.7	2.3
VLU-1415-331□	330	K,M	100kHz/0.25V	0.272	2.5	2.1
VLU-1415-391□	390	K,M	100kHz/0.25V	0.303	2.3	2.0
VLU-1415-471□	470	K,M	100kHz/0.25V	0.342	2.1	1.9
VLU-1415-561□	560	K,M	100kHz/0.25V	0.531	1.8	1.6
VLU-1415-681□	680	K,M	100kHz/0.25V	0.590	1.7	1.5
VLU-1415-821□	820	K,M	100kHz/0.25V	0.728	1.5	1.3
VLU-1415-102□	1000	J,K,M	100kHz/0.25V	0.750	1.4	1.2

※ 1. □ specify the inductance tolerance,J(±5%)K(±10%),M(±20%)

※ 2. IDC1： Based on inductance change (△L/L0：drop10% Max.) @ ambient temp. 25℃

IDC2： Based on temperature rise (△T：40℃ TYP.)

Rated DC Current： The less value which is IDC1 or IDC2.

(4) RELIABILITY TEST METHOD

MECHANICAL

NO.	ITEMS	SPECIFICATIONS	CONDITIONS
1	Solderability test	More than 90% of the termnial electrode should be covered with solder.	Dipping: 245 ± 5 ℃, 3 ± 1 seconds
2	lead tensile strength test	1.0 Kg MIN.	The lead of product is pulled with a load of 1.0kg mininum until lead breakdown. The tensile force shall be recorded.
3	Vibration test	△L/L≦±7% Visual:OK	The product is fixed ento the vibration with amplitude of 1.52m/m at a frequency of 10～55Hz sweeping for lmin. The vibration is done at X,Y, Z direction respectively for 2 houes, totally 6 hours.
4	Soldering heat resistance test	Visual:OK Circuit:OK	The leads of product are dipped into a solder pot of 260±5℃ for a duration of 10±1sec. Nothing particular on visual and open circuitry as a result of ore testing.

ENVIRONMENTAL

NO.	ITEMS	SPECIFICATIONS	CONDITIONS
1	Humidity endurance test	△L/L≦±5%	The product is placed in a chamber of 40±2℃, 90～95%RH for 96 hours. Measurement is done after the reaovery of 4～24 hours.
2	High temp endurance test	△L/L≦±5%	The product is placed in a chamber of 80±2℃, for 72 hours. Measurement is done after recovery of 4～24 hours.
3	Low temp test	△L/L≦±5%	The product is placed in a chamber of -40±2℃, for 96 hours. Measurement is done after recovery of 4～24 hours.
4	Thermal shock test	△L/L≦±5%	The specimens are placed in a chamber and the temp is then lowered to -20±2℃ for one hour. The temp will raised to +80±2℃ for one hour. This constitues one cycle. Ten cycles of such testing shall be completed. Measurement is made after recovery for 4～24 hours from the completion of testing.

(5) PACKAGE SPECIFICATION (mm)