



恒忻企業股份有限公司(EASY MAGNET CORP.)

SPECIFICATION FOR APPROVAL

CUSTOMER	:	
PART NO.	:	
REV. NO.	:	
DESCRIPTION	:	Wire Wound Chip Inductor
EMC NO.	:	NE SERIES
REV. NO.	:	1.0
DOCUMENT NO.	:	
ISSUE DATE	:	2007.01.24

CUSTOMER SIGNATURE		
APPROVED	CHECKED	INSPECTED

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APPROVED	CHECKED	PREPARED
FRANK	LINDA	彭繼湘

SAMPLE MADE IN CHINA

Samples meet RoHS and
Lead-free requirement



WIRE WOUND CHIP INDUCTORS NE SERIES

Introductions

The NE series are wire wound chip inductors widely used in the communication applications such as cellular phones, cable modem, ADSL, repeaters, Bluetooth, and other electronic devices. The wire wound inductors advance in higher self resonate frequency, better Q factor, and much more stable performance. Precious tolerance of 2% is available.

Features

- * Operating temperature -40 to +125 °C for ceramic series and -40 to +85°C for ferrite series.
- * Excellent solderability and resistance to soldering heat .
- * Suitable for reflow soldering..
- * High reliability and easy surface mount assembly.
- * Wide range of inductance values are available for flexible needs.
- * Consisting of 0402 ~ 1812 size.

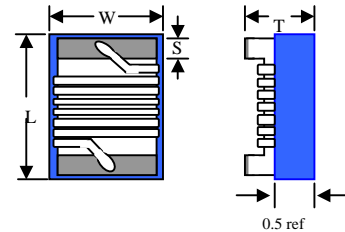
Part Number Code

NE	0805	-	33N	J	□□	
1	2		3	4		Internal Code

1 Product Type

2 Chip Dimension

Size (inch) mm	Length (L) (inch) mm	Width (W) (inch) mm	Thickness (T) (inch) mm	Terminal (S) (inch) mm
NE 0805	(0.080 ± 0.008) 2.00 ± 0.20	(0.050 ± 0.008) 1.25 ± 0.20	(0.048 ± 0.008) 1.20 ± 0.20	(0.016 ± 0.004) 0.40 ± 0.10
NE 1008	(0.098 ± 0.008) 2.50 ± 0.20	(0.080 ± 0.008) 2.00 ± 0.20	(0.063 ± 0.008) 1.60 ± 0.20	(0.020 ± 0.004) 0.50 ± 0.10
NE 1210	(0.126 ± 0.008) 3.20 ± 0.20	(0.098 ± 0.008) 2.50 ± 0.20	(0.087 ± 0.008) 2.20 ± 0.20	(0.020 ± 0.004) 0.50 ± 0.10
NE 1812	(0.18 ± 0.008) 4.50 ± 0.20	(0.126 ± 0.008) 3.20 ± 0.20	(0.126 ± 0.008) 3.20 ± 0.20	(0.020 ± 0.004) 0.50 ± 0.10



3 Inductance Value

3N3 = 3.3 nH	3R3 = 3.3 uH	102 = 1000 uH
33N = 33 nH	330 = 33 uH	
R33 = 330 nH	101 = 100 uH	

4 Tolerance

B = ± 0.20 nH	G = ± 2 %	K = ± 10 %
S = ± 0.3 nH	J = ± 5 %	

Specification

Part No.	Inductance ¹ (uH)	Percent Tolerance	Q ² Min	S.R.F. ³		RDC ⁴ Max (Ω)	IDC ⁵ Max (mA)
				Min (MHz)	Max		
NE 0805 - R47 □□□	0.47 @ 25.2 MHZ	K, J	45 @ 100 MHZ	375		0.95	500
NE 0805 - R56 □□□	0.56 @ 25.2 MHZ	K, J	45 @ 100 MHZ	340		1.10	450
NE 0805 - R68 □□□	0.68 @ 25.2 MHZ	K, J	35 @ 100 MHZ	188		1.20	400
NE 0805 - R82 □□□	0.82 @ 25.2 MHZ	K, J	35 @ 100 MHZ	215		1.50	300
NE 0805 - 1R0 □□□	1.0 @ 25.2 MHZ	K, J	35 @ 50 MHZ	200		2.13	180
NE 0805 - 1R2 □□□	1.2 @ 7.96 MHZ	K, J	15 @ 7.96 MHZ	200		2.38	150
NE 0805 - 1R5 □□□	1.5 @ 7.96 MHZ	K, J	15 @ 7.96 MHZ	200		2.90	130
NE 0805 - 1R8 □□□	1.8 @ 7.96 MHZ	K, J	15 @ 7.96 MHZ	120		3.00	120
NE 0805 - 2R2 □□□	2.2 @ 7.96 MHZ	K, J	15 @ 7.96 MHZ	110		3.10	110
NE 0805 - 2R7 □□□	2.7 @ 7.96 MHZ	K, J	15 @ 7.96 MHZ	100		3.50	100
NE 0805 - 3R3 □□□	3.3 @ 7.96 MHZ	K, J	15 @ 7.96 MHZ	70		2.30	210
NE 0805 - 3R9 □□□	3.9 @ 7.96 MHZ	K, J	15 @ 7.96 MHZ	60		2.50	200
NE 0805 - 4R7 □□□	4.7 @ 7.96 MHZ	K, J	15 @ 7.96 MHZ	50		2.80	180
NE 0805 - 5R6 □□□	5.6 @ 7.96 MHZ	K, J	15 @ 7.96 MHZ	45		3.00	160
NE 0805 - 6R8 □□□	6.8 @ 7.96 MHZ	K, J	15 @ 7.96 MHZ	45		3.20	130
NE 0805 - 8R2 □□□	8.2 @ 7.96 MHZ	K, J	15 @ 7.96 MHZ	40		3.50	120
NE 0805 - 100 □□□	10 @ 2.52 MHZ	K, J	15 @ 2.52 MHZ	40		5.00	80

1. Inductance is measured in HP-4285A Precision LCR meter/
HP-4287A RF LCR meter with HP-16193 fixture.
2. Q is measured in HP-4285A Precision LCR meter,
HP-4287A RF LCR meter with HP-16193 fixture.

3. SRF is measured in ENA E5071B network analyzer
4. RDC is measured in HP-4338B milliohmeter.
5. For 15 °C Rise.
6. Unit weight = 0.0084g (for ref.)

Specification

Part No.	Inductance ¹ (uH)	Percent Tolerance	Q ² Min	S.R.F. ³	RDC ⁴	IDC ⁵
				Min Max (MHz)	Max (Ω)	Max (mA)
NE 1008 - 1R2 □□□	1.2 @ 7.96 MHZ	K, J	20 @ 7.96 MHZ	280	1.30	230
NE 1008 - 1R5 □□□	1.5 @ 7.96 MHZ	K, J	20 @ 7.96 MHZ	250	1.65	220
NE 1008 - 1R8 □□□	1.8 @ 7.96 MHZ	K, J	20 @ 7.96 MHZ	200	2.20	210
NE 1008 - 2R2 □□□	2.2 @ 7.96 MHZ	K, J	20 @ 7.96 MHZ	160	2.35	200
NE 1008 - 2R7 □□□	2.7 @ 7.96 MHZ	K, J	20 @ 7.96 MHZ	130	2.60	195
NE 1008 - 3R3 □□□	3.3 @ 7.96 MHZ	K, J	20 @ 7.96 MHZ	80	2.85	185
NE 1008 - 3R9 □□□	3.9 @ 7.96 MHZ	K, J	20 @ 7.96 MHZ	50	4.00	180
NE 1008 - 4R7 □□□	4.7 @ 7.96 MHZ	K, J	20 @ 7.96 MHZ	45	4.30	175
NE 1008 - 5R6 □□□	5.6 @ 7.96 MHZ	K, J	20 @ 7.96 MHZ	42	2.60	170
NE 1008 - 6R8 □□□	6.8 @ 7.96 MHZ	K, J	20 @ 7.96 MHZ	39	2.80	165
NE 1008 - 8R2 □□□	8.2 @ 7.96 MHZ	K, J	20 @ 7.96 MHZ	36	3.05	160
NE 1008 - 100 □□□	10 @ 2.52 MHZ	K, J	15 @ 2.52 MHZ	33	3.50	150
NE 1008 - 120 □□□	12 @ 2.52 MHZ	K, J	15 @ 2.52 MHZ	30	3.60	140
NE 1008 - 150 □□□	15 @ 2.52 MHZ	K, J	15 @ 2.52 MHZ	26	4.00	130
NE 1008 - 180 □□□	18 @ 2.52 MHZ	K, J	15 @ 2.52 MHZ	24	4.50	120
NE 1008 - 220 □□□	22 @ 2.52 MHZ	K, J	15 @ 2.52 MHZ	22	4.80	110
NE 1008 - 270 □□□	27 @ 2.52 MHZ	K, J	15 @ 2.52 MHZ	21	5.30	95
NE 1008 - 330 □□□	33 @ 2.52 MHZ	K, J	15 @ 2.52 MHZ	20	6.10	85
NE 1008 - 390 □□□	39 @ 2.52 MHZ	K, J	15 @ 2.52 MHZ	18	8.30	60
NE 1008 - 470 □□□	47 @ 2.52 MHZ	K, J	15 @ 2.52 MHZ	17	12.60	45

- Inductance is measured in HP-4285A Precision LCR meter/
HP-4287A RF LCR meter with HP-16193 fixture.
- Q is measured in HP-4285A Precision LCR meter,
HP-4287A RF LCR meter with HP-16193 fixture.

- SRF is measured in ENA E5071B network analyzer
- RDC is measured in HP-4338B milliohmeter.
- For 15 °C Rise.
- Unit weight = 0.025g (for ref.)

Specification

Part No.	Inductance ¹ (uH)	Percent Tolerance	Q ² Min	S.R.F. ³	RDC ⁴	IDC ⁵
				Min (MHz)	Max (Ω)	Max (mA)
NE 1210 - 1R2 □□□	1.2 @ 7.96 MHZ	K, J	30 @ 7.96 MHZ	100	0.70	390
NE 1210 - 1R5 □□□	1.5 @ 7.96 MHZ	K, J	30 @ 7.96 MHZ	85	0.75	370
NE 1210 - 1R8 □□□	1.8 @ 7.96 MHZ	K, J	30 @ 7.96 MHZ	80	0.80	350
NE 1210 - 2R2 □□□	2.2 @ 7.96 MHZ	K, J	30 @ 7.96 MHZ	75	0.90	320
NE 1210 - 2R7 □□□	2.7 @ 7.96 MHZ	K, J	30 @ 7.96 MHZ	70	1.10	290
NE 1210 - 3R3 □□□	3.3 @ 7.96 MHZ	K, J	30 @ 7.96 MHZ	60	1.40	260
NE 1210 - 3R9 □□□	3.9 @ 7.96 MHZ	K, J	30 @ 7.96 MHZ	55	1.70	250
NE 1210 - 4R7 □□□	4.7 @ 7.96 MHZ	K, J	30 @ 7.96 MHZ	50	2.30	220
NE 1210 - 5R6 □□□	5.6 @ 7.96 MHZ	K, J	20 @ 7.96 MHZ	47	1.60	200
NE 1210 - 6R8 □□□	6.8 @ 7.96 MHZ	K, J	20 @ 7.96 MHZ	43	2.20	180
NE 1210 - 8R2 □□□	8.2 @ 7.96 MHZ	K, J	20 @ 7.96 MHZ	40	2.40	170
NE 1210 - 100 □□□	10 @ 2.52 MHZ	K, J	20 @ 2.52 MHZ	36	3.28	150
NE 1210 - 120 □□□	12 @ 2.52 MHZ	K, J	20 @ 2.52 MHZ	33	3.40	140
NE 1210 - 150 □□□	15 @ 2.52 MHZ	K, J	20 @ 2.52 MHZ	30	3.90	125
NE 1210 - 180 □□□	18 @ 2.52 MHZ	K, J	15 @ 2.52 MHZ	27	4.20	110
NE 1210 - 220 □□□	22 @ 2.52 MHZ	K, J	15 @ 2.52 MHZ	25	6.00	90
NE 1210 - 270 □□□	27 @ 2.52 MHZ	K, J	15 @ 2.52 MHZ	20	6.80	80
NE 1210 - 330 □□□	33 @ 2.52 MHZ	K, J	15 @ 2.52 MHZ	17	7.50	70
NE 1210 - 390 □□□	39 @ 2.52 MHZ	K, J	15 @ 2.52 MHZ	16	8.00	65
NE 1210 - 470 □□□	47 @ 2.52 MHZ	K, J	15 @ 2.52 MHZ	15	8.50	60

* □□□: Please specify the inductance tolerance for the first □. J (±5%), K (±10%), or M (±20%)

1. Inductance is measured in HP-4285A Precision LCR meter/
HP-4286A RF LCR meter with HP-16193 fixture.

2. Q is measured in HP-4285A Precision LCR meter,
HP-4286A RF LCR meter with HP-16193 fixture.

3. SRF is measured in ENA E5071B network analyzer

4. RDC is measured in HP-4338B milliohmmeter.

5. For 15 °C Rise.

6. Unit weight = 0.045g (for ref.)

**CHIP INDUCTOR
WIRE WOUND TYPE**

NE 1812 FERRITE SERIES

Specification

Part No.	Inductance ¹ (uH)	Percent Tolerance	Q ² Min	S.R.F. ³	RDC ⁴	IDC ⁵
				Min (MHz)	Max (Ω)	Max (mA)
NE 1812 - 120 □□□	12 @ 2.52 MHZ	K, J	40	55	2.00	310
NE 1812 - 150 □□□	15 @ 2.52 MHZ	K, J	40	45	2.50	290
NE 1812 - 180 □□□	18 @ 2.52 MHZ	K, J	45	36	2.80	270
NE 1812 - 220 □□□	22 @ 2.52 MHZ	K, J	45	32	3.20	260
NE 1812 - 270 □□□	27 @ 2.52 MHZ	K, J	45	27	3.60	240
NE 1812 - 330 □□□	33 @ 2.52 MHZ	K, J	45	23	4.00	230
NE 1812 - 390 □□□	39 @ 2.52 MHZ	K, J	45	18	4.50	210
NE 1812 - 470 □□□	47 @ 2.52 MHZ	K, J	40	16	5.00	200
NE 1812 - 560 □□□	56 @ 2.52 MHZ	K, J	40	13	5.50	190
NE 1812 - 680 □□□	68 @ 2.52 MHZ	K, J	40	10	6.00	180
NE 1812 - 820 □□□	82 @ 2.52 MHZ	K, J	40	9.0	7.00	170
NE 1812 - 101 □□□	100 @ 0.796 MHZ	K, J	40	8.5	8.00	150
NE 1812 - 121 □□□	120 @ 0.796 MHZ	K, J	35	8.5	11.50	135
NE 1812 - 151 □□□	150 @ 0.796 MHZ	K, J	35	8.5	13.00	125
NE 1812 - 181 □□□	180 @ 0.796 MHZ	K, J	35	8.0	14.20	120
NE 1812 - 221 □□□	220 @ 0.796 MHZ	K, J	35	6.0	16.20	115
NE 1812 - 271 □□□	270 @ 0.796 MHZ	K, J	35	5.0	20.50	105
NE 1812 - 331 □□□	330 @ 0.796 MHZ	K, J	35	4.5	22.50	100
NE 1812 - 391 □□□	390 @ 0.796 MHZ	K, J	35	3.5	24.50	90
NE 1812 - 471 □□□	470 @ 0.796 MHZ	K, J	35	3.0	26.50	85
NE 1812 - 561 □□□	560 @ 0.796 MHZ	K, J	30	2.0	28.50	75
NE 1812 - 681 □□□	680 @ 0.796 MHZ	K, J	30	1.8	38.00	60
NE 1812 - 821 □□□	820 @ 0.796 MHZ	K, J	30	1.6	41.00	55
NE 1812 - 102 □□□	1000 @ 0.796 MHZ	K, J	30	1.5	44.00	50

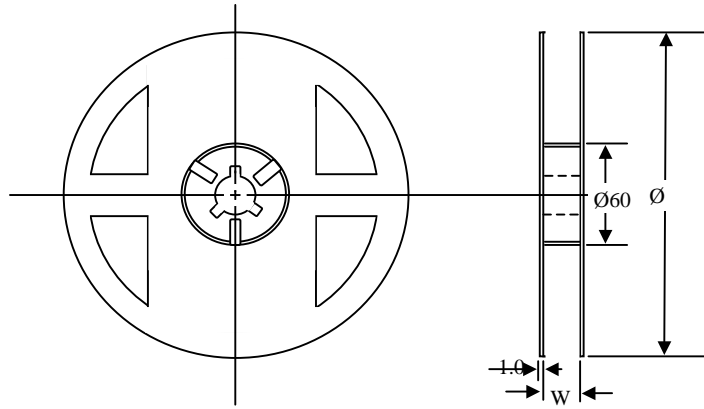
* □□□: Please specify the inductance tolerance for the first □. J (±5%), or K (±10%)

- Inductance is measured in HP-4285A RF LCR meter with SMD-A fixture.
- Q is measured in HP-4285A RF LCR meter with SMD-A fixture.

- SRF is measured in ENA E5071B network analyzer
- RDC is measured in HP-4338B milliohmmeter.
- For 15 °C Rise.
- Unit weight = 0.15g (for ref.)

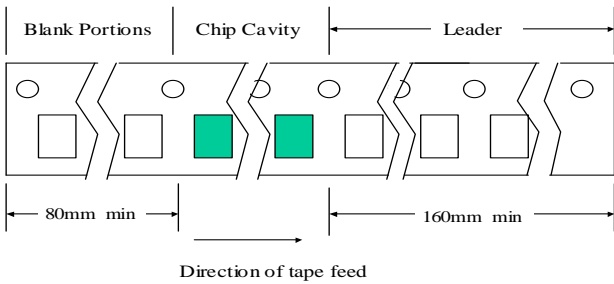
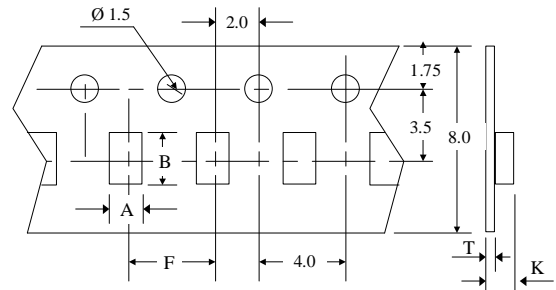
Packing Quantity

Type	Pcs / Reel
NE0805	2,000
NE1008	2,000
NE1210	2,000
NE1812	750



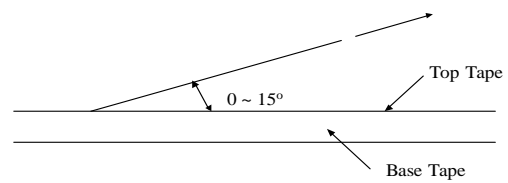
Dimensions (unit: m/m)

Type	Chip Cavity		Insert Pitch F	Tape Thickness		
	A	B		K	T	W
NE0805	1.42	2.26	4.00	1.30	0.20	8.00
NE1008	2.23	2.73	4.00	1.80	0.20	8.00
NE1210	2.69	3.56	4.00	2.40	0.20	8.00
NE1812	3.60	5.00	8.00	3.60	0.30	12.00



Top Tape Strength

The top tape requires a peel-off force of 0.2 to 0.7N in the direction of the arrow as illustrated below.



Dimensions (unit : m/m)

TYPE	A	B	C
NE0805	2.60	0.75	1.30
NE1008	3.00	1.20	2.20
NE1210	4.00	1.70	2.82
NE1812	5.30	3.00	4.00

Recommended Pattern

