

## LD Series



LD series is the newest open type ferrite wire wound chip inductors. The wire wound ferrite construction supports lower DCR than other open type inductors.

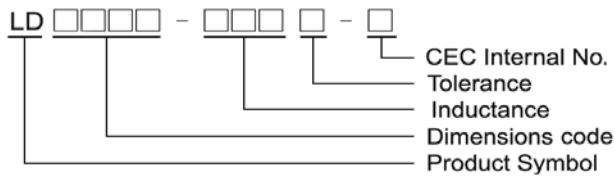
### Features

- RoHS compliant
- SMD type wire-wound chip inductor with low DC resistance
- Wide inductance range (0.9uH~100uH)

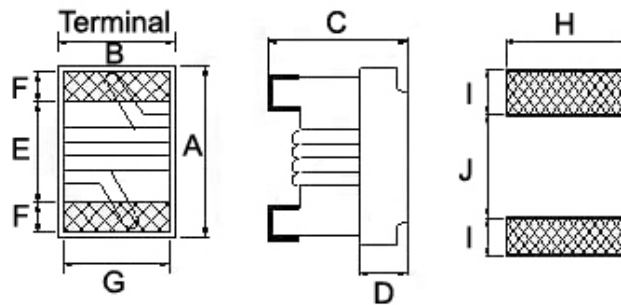
### Applications

- DSC, DVC, MD, PDA
- Portable digital devices

### Product Identification



### Shape and Dimensions / Recommended Pattern



Dimensions in mm

TYPE	A Max	B Max	C Max	D	E	F	G	H	I	J
LD0805	2.4	1.72	1.52	0.70	1.00	0.50	1.27	1.78	1.02	0.76
LD1008	2.99	2.50	2.20	0.70	1.52	0.51	2.03	2.54	1.02	1.27

## Electrical Characteristics

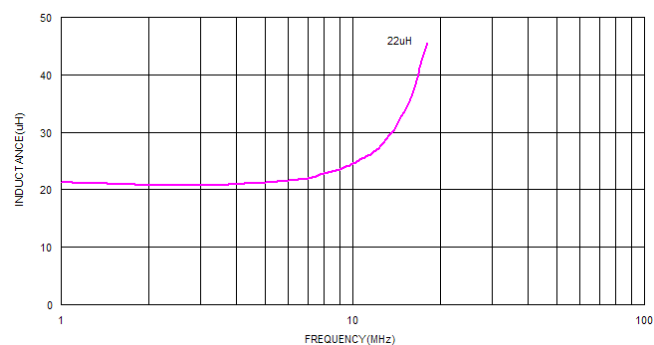
Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	Q Typ.	SRF (MHz) Min	RDC (Ω±30%)	IDC (mA) Max	Color
LD0805-1R0□-N	1.0	10 / 20	7.96	18	100	0.10	800	Black
LD0805-1R5□-N	1.5	10 / 20	7.96	18	90	0.18	650	Brown
LD0805-2R2□-N	2.2	10 / 20	7.96	18	70	0.24	550	Red
LD0805-3R3□-N	3.3	10 / 20	7.96	18	55	0.30	450	Orange
LD0805-4R7□-N	4.7	10 / 20	7.96	18	50	0.47	360	Yellow
LD0805-6R8□-N	6.8	10 / 20	7.96	24	60	0.75	290	Green
LD0805-100□-N	10	10 / 20	2.52	18	25	0.90	290	Blue
LD0805-150□-N	15	10 / 20	2.52	18	25	1.60	230	Violet
LD0805-220□-N	22	10 / 20	2.52	18	17	1.95	190	Gray
LD0805-330□-N	33	10 / 20	2.52	17	15	2.60	120	White
LD0805-470□-N	47	10 / 20	2.52	17	11	3.90	95	Black
LD0805-680□-N	68	10 / 20	2.52	17	11	5.50	95	Brown
LD0805-101□-N	100	10 / 20	1.00	12	9	9.00	70	Red

**Note: When ordering, please specify tolerance code. Tolerance: K=±10% , M=±20%**

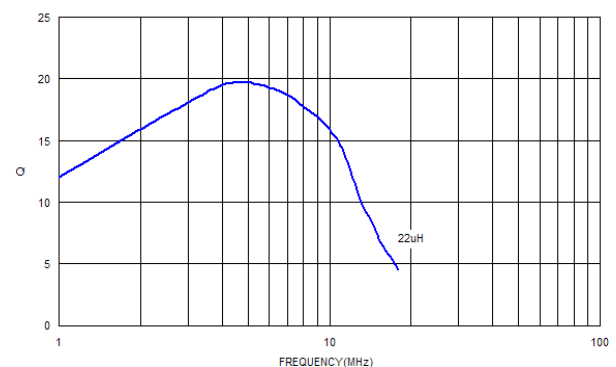
- Operating temperature range - 25°C ~ 105°C(Including self - temperature rise)
- IDC for Inductance drop 10% from its value with current
- Measure Equipment :  
 L & Q : Agilent E4991A+Agilent HP16197A(over 1MHz)/Agilent HP4285A(under 1MHz)  
 SRF : HP8753D/Agilent E4991A  
 RDC : DIGITAL MILLINHM METER CHROMA 16502  
 IDC : HP4284A+HP42841A/HP4285A+HP42841A

**Test Instruments : Agilent E4991A Material/Impedance Analyzer**

### Typical L vs. Frequency



### Typical Q vs. Frequency



## Electrical Characteristics

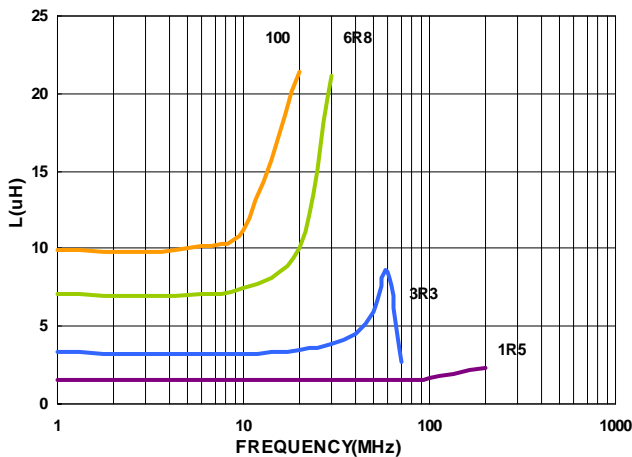
Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	Q Typ.	SRF (MHz) Min	RDC (Ω) Max	IDC (mA) Typ.	I <sub>rms</sub> (mA) Max	Color		
									1 <sup>ST</sup>	2 <sup>ND</sup>	3 <sup>RD</sup>
LD1008-R90□-N	0.9	10	2.5	25	300	0.1	1400	1300	White	Black	Brown
LD1008-1R1□-N	1.1	10	2.5	24	275	0.105	1300	1200	Brown	Brown	Red
LD1008-1R3□-N	1.3	5 / 10	2.5	24	220	0.11	1200	1100	Brown	Orange	Red
LD1008-1R5□-N	1.5	5 / 10	2.5	22	210	0.125	1100	1000	Brown	Yellow	Red
LD1008-1R9□-N	1.9	5 / 10	2.5	22	165	0.14	1000	1000	Brown	White	Red
LD1008-2R2□-N	2.2	5 / 10	2.5	21	75	0.155	950	950	Red	Red	Red
LD1008-2R7□-N	2.7	5 / 10	2.5	22	57	0.19	800	900	Red	Violet	Red
LD1008-3R3□-N	3.3	5 / 10	2.5	21	54	0.21	750	800	Orange	Orange	Red
LD1008-3R9□-N	3.9	5 / 10	2.5	21	50	0.22	700	800	Orange	White	Red
LD1008-4R7□-N	4.7	5 / 10	2.5	27	48	0.435	700	650	Yellow	Violet	Red
LD1008-5R8□-N	5.8	5 / 10	2.5	21	33	0.28	550	750	Green	Gray	Red
LD1008-6R8□-N	6.8	5 / 10	2.5	20	28	0.315	500	700	Blue	Gray	Red
LD1008-8R2□-N	8.2	5 / 10	2.5	20	24	0.395	500	650	Gray	Red	Red
LD1008-100□-N	10	5 / 10	2.5	22	20	0.48	450	550	Brown	Black	Orange

**Note: When ordering, please specify tolerance code. Tolerance: J=±5% , K=±10%**

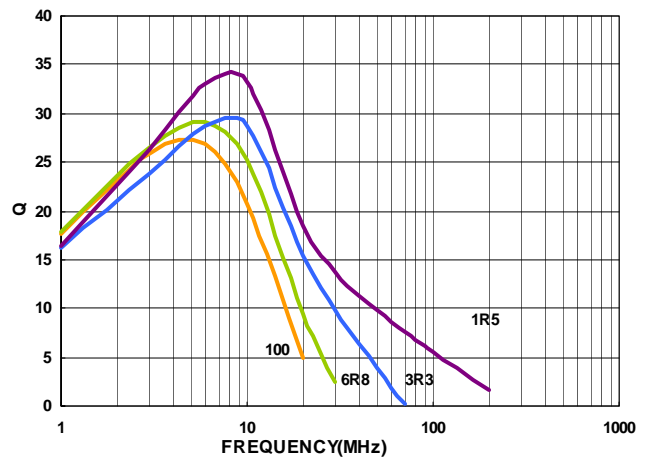
- Operating temperature range - 25°C ~ 105°C(Including self - temperature rise)
- IDC for Inductance drop 10% from its value with current
- I<sub>rms</sub> for a 40°C temperature rise from 25°C ambient with current
- Measure Equipment :  
 L : Agilent E4991A/HP4287A+16197A  
 SRF : HP8753D/Agilent E4991A  
 RDC : DIGITAL MILLINHM METER CHROMA 16502  
 IDC : HP4284A+HP42841A/HP4285A+HP42841A

## Test Instruments : Agilent E4991A Material/Impedance Analyzer

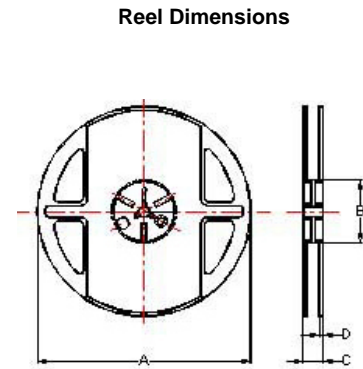
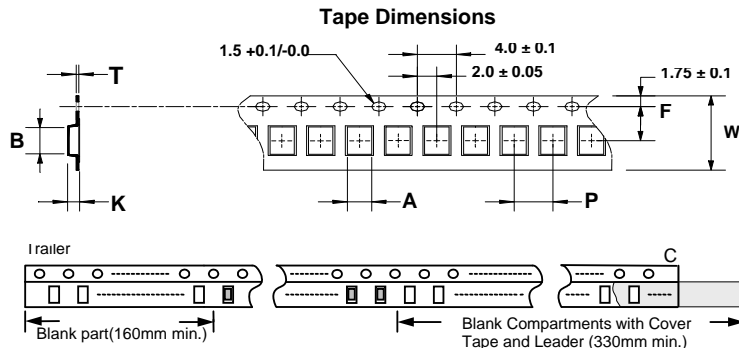
**Typical L vs. Frequency**



**Typical Q vs. Frequency**



## Packaging Specifications



### Dimensions in mm

TYPE	Tape Dimensions							Reel Dimensions				Quantity
	A	B	T	W	P	F	K	A	B	C	D	PCS / REEL
LD 0805	1.60	2.42	0.22	8	4	3.5	1.45	178	60	12	1.5	2000
LD 1008	2.40	2.93	0.26	8	4	3.5	2.25	178	60	12	1.5	2000