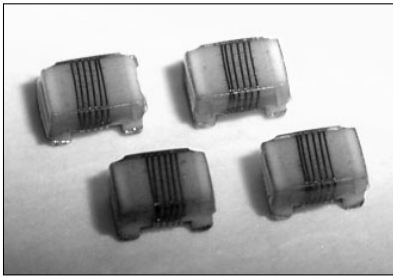


# CERAMIC CHIP INDUCTORS



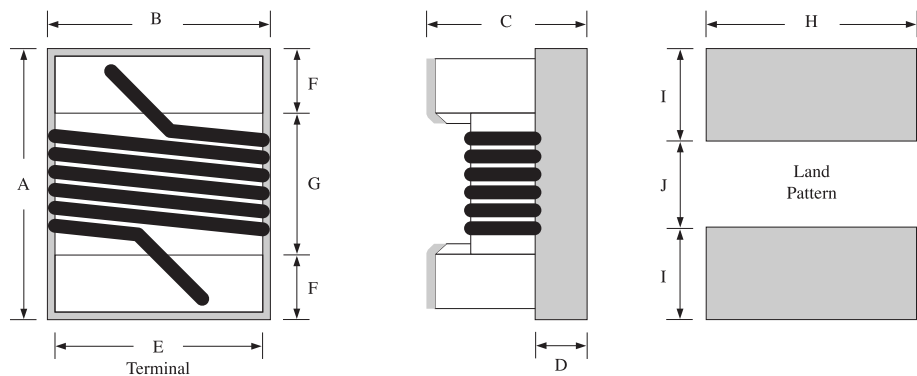
## ■ FEATURES

ABCO chip inductor is wire wound type ceramic Inductor. And our product provide high Q value. So ABCO chip inductor can be SRF(self resonant frequency)industry. This can often eliminate the need for variable components in tunner circuits and oscillators. With our engineering and manufacturing facilities,we're able to quickly provide tailored to your needs.

## ■ APPLICATION

- RF circuits for mobile phone or pagers and other communication devices.

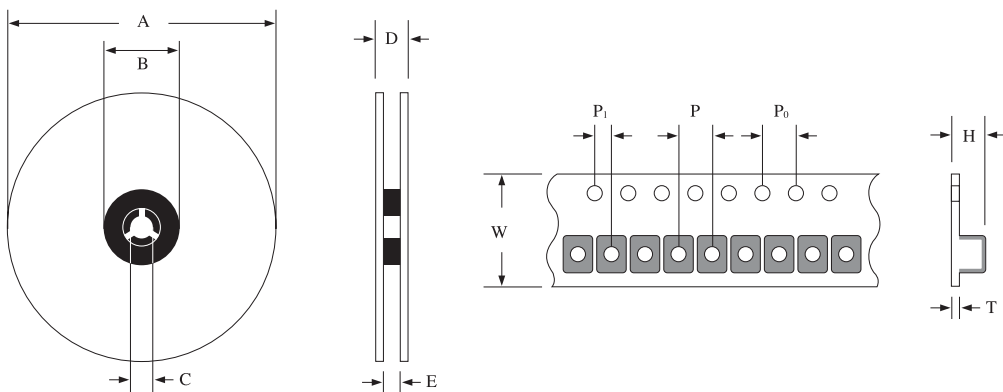
## ■ DIMENSIONS(mm)



Unit: mm

SERIES	A Max.	B Max.	C Max.	D	E	F Ref.	G	H	I	J
LMC 2012	2.29	1.73	1.52	0.51	1.27	0.51	1.02	1.78	1.02	0.76
LMC 1608	1.80	1.12	1.02	0.38	0.76	0.33	0.86	1.02	0.64	0.64
LMC 1005	1.19	0.64	0.66	0.25	0.51	0.23	0.56	0.66	0.36	0.46

## ■ TAPE AND REEL SPECIFICATIONS



Unit: mm

SERIES	Reel dimensions					Tape dimensions						Per Reel(Q'ty)
	A	B	C	D	E	W	P	P0	P1	H	T	
LMC 2012	180	60	13	14.4	8.4	8	4	4	2	2.1	0.3	2,000
LMC 1608	180	100	13	14.4	8.4	8	4	4	2	-	0.95	3,000
LMC 1005	180	100	13	14.4	8.4	8	2	4	2	-	0.6	4,000

# ITEM PART NUMBERS

## LMC 2012

Odering code <sup>1</sup>	Inductance <sup>2</sup> (nH)	Tolerance <sup>3</sup> (%)	Q <sup>4</sup> (min.)	SRF Min <sup>5</sup> (MHZ)	Rdc Max <sup>6</sup> (Ω)	Idc Max <sup>7</sup> (mA)
LMC 2012TP- 3N3 J	3.3 @ 250MHz	± 5	50 @ 1500MHz	7900	0.08	600
LMC 2012TP- 6N8 G,J	6.8 @ 250MHz	± 2, 5	50 @ 1000MHz	5500	0.11	600
LMC 2012TP- 8N2 J	8.2 @ 250MHz	± 5	50 @ 1000MHz	4700	0.12	600
LMC 2012TP- 120 G,J	12 @ 250MHz	± 2, 5	50 @ 500MHz	4000	0.15	600
LMC 2012TP- 150 G,J	15 @ 250MHz	± 2, 5	50 @ 500MHz	3400	0.17	600
LMC 2012TP- 180 G,J	18 @ 250MHz	± 2, 5	50 @ 500MHz	3300	0.20	600
LMC 2012TP- 220 G,J	22 @ 250MHz	± 2, 5	55 @ 500MHz	2600	0.22	500
LMC 2012TP- 240 G,J	24 @ 250MHz	± 2, 5	55 @ 500MHz	2550	0.23	500
LMC 2012TP- 270 G,J	27 @ 250MHz	± 2, 5	55 @ 500MHz	2500	0.25	500
LMC 2012TP- 330 G,J	33 @ 250MHz	± 2, 5	60 @ 500MHz	2050	0.27	500
LMC 2012TP- 390 G,J	39 @ 250MHz	± 2, 5	60 @ 500MHz	2000	0.29	500
LMC 2012TP- 470 G,J	47 @ 250MHz	± 2, 5	60 @ 500MHz	1650	0.31	500
LMC 2012TP- 560 G,J	56 @ 250MHz	± 2, 5	60 @ 500MHz	1550	0.34	500
LMC 2012TP- 680 G,J	68 @ 250MHz	± 2, 5	60 @ 500MHz	1450	0.38	500
LMC 2012TP- 820 G,J	82 @ 150MHz	± 2, 5	65 @ 500MHz	1300	0.42	400
LMC 2012TP- 910 G,J	91 @ 150MHz	± 2, 5	65 @ 500MHz	1250	0.44	400
LMC 2012TP- 101 G,J	100 @ 150MHz	± 2, 5	65 @ 500MHz	1200	0.46	400
LMC 2012TP- 121 G,J	120 @ 150MHz	± 2, 5	50 @ 250MHz	1100	0.51	400
LMC 2012TP- 151 G,J	150 @ 100MHz	± 2, 5	50 @ 250MHz	920	0.56	400
LMC 2012TP- 181 G,J	180 @ 100MHz	± 2, 5	50 @ 250MHz	870	0.64	400
LMC 2012TP- 221 J	220 @ 100MHz	± 5	50 @ 250MHz	850	0.70	400
LMC 2012TP- 271 J	270 @ 100MHz	± 5	48 @ 250MHz	650	1.00	350
LMC 2012TP- 331 J	330 @ 100MHz	± 5	48 @ 250MHz	600	1.40	310
LMC 2012TP- 391 G,J	390 @ 100MHz	± 2, 5	48 @ 250MHz	560	1.50	290
LMC 2012TP- 471 G,J	470 @ 50MHz	± 2, 5	33 @ 100MHz	375	1.90	230
LMC 2012TP- 561 G,J	560 @ 25MHz	± 2, 5	23 @ 50MHz	340	2.35	180
LMC 2012TP- 681 G,J	680 @ 25MHz	± 2, 5	23 @ 50MHz	250	3.51	120
LMC 2012TP- 821 G,J	820 @ 25MHz	± 2, 5	23 @ 50MHz	215	4.20	80

1. How to order

LM C 2012 TP 3N3 J  
 (1) (2) (3) (4) (5) (6)

- (1) Part name
- (2) Material
- (3) Body size
- (4) TP: Taping
- (5) Inductance Value  
 Ex: 3N3(3.3nH), 560(56nH), 391(390nH)
- (6) Inductance Tol.

2. Inductance measured: RF LCR METER(HP4286A) + 16193A fixture

3. G= ±2%, J= ±5%, K= ±10%

4. Q measured: RF LCR METER(HP4286A) + 16193A fixture

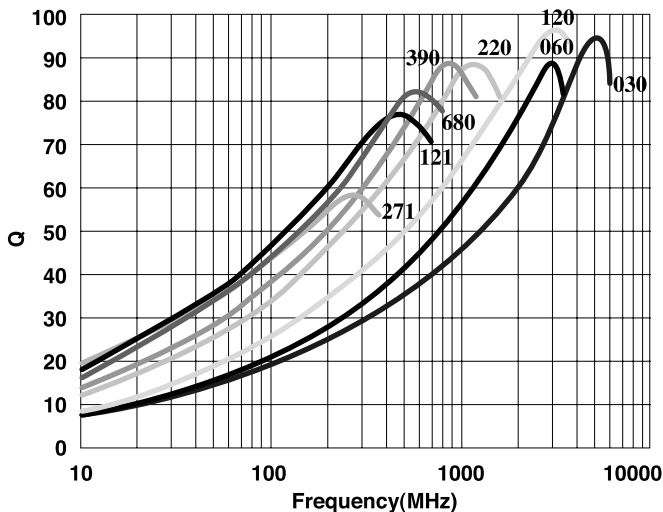
5. SRF measured: NETWORK ANALYZER(HP8753D) + ABCO SMD-D test fixture

6. Rdc measured: RF LCR METER(HP4286A) + 16193A fixture

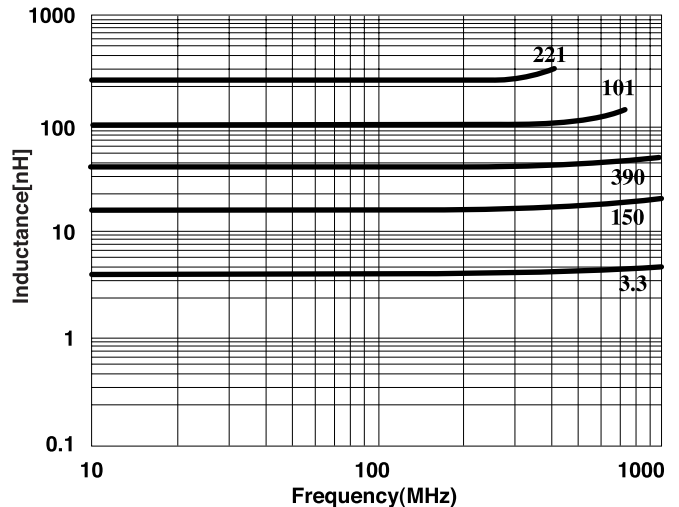
7. For 15°C Rise

### ELECTRICAL CHARACTERISTICS

#### Q vs F Characteristic



#### L vs F Characteristic



# ITEM PART NUMBERS

## LMC 1608

Ordering code <sup>1</sup>	Inductance <sup>2</sup> (nH)	Tolerance <sup>3</sup> (%)	Q <sup>4</sup> (min.)	SRF Min <sup>5</sup> (MHZ)	Rdc Max <sup>6</sup> (Ω)	Idc Max <sup>7</sup> (mA)	900MHz		1.7GHz	
							L Typ	Q Typ	L Typ	Q Typ
LMC 1608TP-1N6G,J	1.6 @ 250MHz	± 2, 5	24	12500	0.030	700	1.67	49	1.65	63
LMC 1608TP-1N8G,J	1.8 @ 250MHz	± 2, 5	16	12500	0.045	700	1.63	35	1.66	50
LMC 1608TP-3N6G,J	3.6 @ 250MHz	± 2, 5	22	5900	0.063	700	3.72	53	3.71	65
LMC 1608TP-3N9G,J	3.9 @ 250MHz	± 2, 5	22	6900	0.080	700	3.95	49	3.96	67
LMC 1608TP-4N3G,J	4.3 @ 250MHz	± 2, 5	22	5900	0.063	700	4.32	50	4.33	70
LMC 1608TP-4N7G,J	4.7 @ 250MHz	± 2, 5	20	5800	0.116	700	4.72	47	4.75	57
LMC 1608TP-5N1G,J	5.1 @ 250MHz	± 2, 5	20	5700	0.140	700	4.93	47	4.95	56
LMC 1608TP-6N8G,J	6.8 @ 250MHz	± 2, 5	27	5800	0.110	700	6.75	60	7.10	81
LMC 1608TP-7N5G,J	7.5 @ 250MHz	± 2, 5	28	4800	0.106	700	7.70	60	7.82	65
LMC 1608TP-8N7G,J	8.7 @ 250MHz	± 2, 5	28	4600	0.109	700	8.86	62	9.32	58
LMC 1608TP-9N5G,J	9.5 @ 250MHz	± 2, 5	28	5400	0.135	700	9.70	59	9.92	61
LMC 1608TP-10NG,J	10 @ 250MHz	± 2, 5	31	4800	0.130	700	10.0	66	10.6	83
LMC 1608TP-11NG,J	11 @ 250MHz	± 2, 5	33	4000	0.086	700	11.0	53	11.5	56
LMC 1608TP-12NG,J	12 @ 250MHz	± 2, 5	35	4000	0.130	700	12.3	72	13.5	83
LMC 1608TP-15NG,J	15 @ 250MHz	± 2, 5	35	4000	0.170	700	15.4	64	16.8	89
LMC 1608TP-16NG,J	16 @ 250MHz	± 2, 5	34	3300	0.104	700	16.2	55	17.3	52
LMC 1608TP-18NG,J	18 @ 250MHz	± 2, 5	35	3100	0.170	700	18.7	70	21.4	69
LMC 1608TP-20NG,J	20 @ 250MHz	± 2, 5	40	3000	0.140	700	20.8	71	23.7	70
LMC 1608TP-22NG,J	22 @ 250MHz	± 2, 5	38	3000	0.190	700	22.8	73	26.1	71
LMC 1608TP-24NG,J	24 @ 250MHz	± 2, 5	37	2650	0.135	700	24.5	45	28.7	39
LMC 1608TP-27NG,J	27 @ 250MHz	± 2, 5	40	2800	0.220	600	29.2	74	34.6	65
LMC 1608TP-30NG,J	30 @ 250MHz	± 2, 5	37	2250	0.144	600	31.4	47	39.9	28
LMC 1608TP-33NG,J	33 @ 250MHz	± 2, 5	40	2300	0.220	600	36.0	67	49.5	42
LMC 1608TP-36NG,J	36 @ 250MHz	± 2, 5	38	2080	0.250	600	39.4	47	52.7	24
LMC 1608TP-39NG,J	39 @ 250MHz	± 2, 5	40	2200	0.250	600	42.7	60	60.2	40
LMC 1608TP-43NG,J	43 @ 250MHz	± 2, 5	39	2000	0.280	600	47.0	44	64.9	21
LMC 1608TP-47NG,J	47 @ 200MHz	± 2, 5	38	2000	0.250	600	52.2	62	77.2	35
LMC 1608TP-56NG,J	56 @ 200MHz	± 2, 5	38	1900	0.310	600	62.5	56	97.0	26
LMC 1608TP-68NG,J	68 @ 200MHz	± 2, 5	37	1700	0.340	600	80.5	54	168	21
LMC 1608TP-72NG,J	72 @ 150MHz	± 2, 5	34	1700	0.490	400	82.0	53	135	20
LMC 1608TP-82NG,J	82 @ 150MHz	± 2, 5	34	1700	0.540	400	96.2	54	177	21
LMC 1608TP-R10G,J	100 @ 150MHz	± 2, 5	34	1400	0.580	400	124	49	-	-
LMC 1608TP-R11G,J	110 @ 150MHz	± 2, 5	32	1350	0.610	300	138	43	-	-
LMC 1608TP-R12G,J	120 @ 150MHz	± 2, 5	32	1300	0.750	300	166	39	-	-
LMC 1608TP-R15G,J	150 @ 150MHz	± 2, 5	28	990	0.920	280	250	25	-	-
LMC 1608TP-R18G,J	180 @ 150MHz	± 2, 5	25	990	1.250	240	305	22	-	-
LMC 1608TP-R22G,J	220 @ 100MHz	± 2, 5	25	900	1.900	200	480	8	-	-
LMC 1608TP-R27G,J	270 @ 100MHz	± 2, 5	24	900	2.900	170	980	4	-	-
LMC 1608TP-R30G,J	300 @ 100MHz	± 2, 5	25	800	2.900	150	-	-	-	-
LMC 1608TP-R33G,J	330 @ 100MHz	± 2, 5	22	600	4.200	100	-	-	-	-

### 1. How to order

**LM C 1608 TP 1N6 J**  
 (1) (2) (3) (4) (5) (6)

(1) Part name (2) Material  
 (3) Body size (4) TP: Taping

(5) Inductance  
 Ex: 1N6(1.6nH), 27N(27nH), R27(270nH)

(6) Inductance Tol.

### 2. Inductance measured: RF LCR METER(HP4286A) + 16193A fixture

3. G= ± 2%, J= ± 5%, K= ± 10%

4. Q measured: RF LCR METER(HP4286A) + 16193A fixture

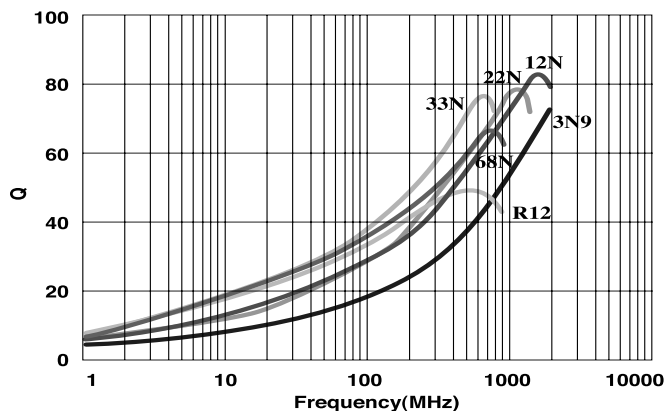
5. SRF measured: NETWORK ANALYZER(HP8753D) + ABCO SMD-D test fixture

6. Rdc measured: RF LCR METER(HP4286A) + 16193A fixture

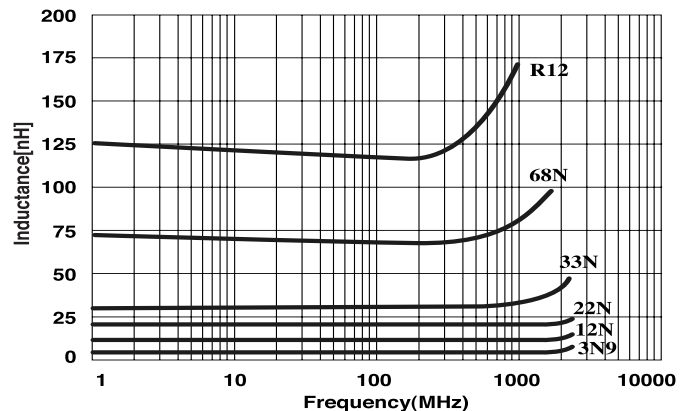
7. For 15°C Rise

## ■ ELECTRICAL CHARACTERISTICS

### ● Q vs F Characteristic



### ● L vs F Characteristic



## LMC 1005

Ordering code <sup>1</sup>	Inductance <sup>2</sup> (nH)	Tolerance <sup>3</sup> (%)	Q <sup>4</sup> (min.)	SRF Min <sup>5</sup> (MHZ)	Rdc Max <sup>6</sup> (Ω)	Idc Max <sup>7</sup> (mA)	900MHz		1.7GHz	
							L Typ	Q Typ	L Typ	Q Typ
LMC 1005TP- 1N0J,K	1.0 @ 250MHz	± 5, 10	9	6000	0.080	1360	1.02	77	1.02	69
LMC 1005TP- 1N5J,K	1.5 @ 250MHz	± 5, 10	13	6000	0.040	1260	1.49	42	1.50	58
LMC 1005TP- 1N8J,K	1.8 @ 250MHz	± 5, 10	15	6000	0.050	1060	1.74	46	1.74	64
LMC 1005TP- 2N0J,K	2.0 @ 250MHz	± 5, 10	16	6000	0.070	1040	1.93	54	1.93	75
LMC 1005TP- 2N2J,K	2.2 @ 250MHz	± 5, 10	14	6000	0.070	960	2.19	59	2.23	100
LMC 1005TP- 2N3J,K	2.3 @ 250MHz	± 5, 10	10	6000	0.090	800	2.28	37	2.32	45
LMC 1005TP- 2N7J,K	2.7 @ 250MHz	± 5, 10	10	6000	0.220	520	2.69	29	2.80	39
LMC 1005TP- 3N3J,K	3.3 @ 250MHz	± 5, 10	19	6000	0.066	840	3.10	65	3.12	87
LMC 1005TP- 3N6J,K	3.6 @ 250MHz	± 5, 10	19	6000	0.066	840	3.56	45	3.62	71
LMC 1005TP- 3N9J,K	3.9 @ 250MHz	± 5, 10	19	5800	0.066	840	3.89	50	4.00	75
LMC 1005TP- 4N7J,K	4.7 @ 250MHz	± 5, 10	20	5800	0.070	800	4.71	56	5.25	80
LMC 1005TP- 5N1J,K	5.1 @ 250MHz	± 5, 10	20	5800	0.083	800	5.15	56	5.25	80
LMC 1005TP- 5N6J,K	5.6 @ 250MHz	± 5, 10	20	5800	0.083	760	5.16	54	5.28	81
LMC 1005TP- 6N2J,K	6.2 @ 250MHz	± 5, 10	20	5800	0.083	760	6.16	52	6.37	76
LMC 1005TP- 7N5J,K	7.5 @ 250MHz	± 5, 10	22	5800	0.104	680	7.91	60	8.22	88
LMC 1005TP- 8N2J,K	8.2 @ 250MHz	± 5, 10	22	4400	0.104	680	8.50	57	8.85	84
LMC 1005TP- 9N0J,K	9 @ 250MHz	± 5, 10	22	4160	0.130	680	9.70	62	9.53	78
LMC 1005TP- 10NJ,K	10 @ 250MHz	± 5, 10	21	3900	0.130	480	9.80	50	10.1	67
LMC 1005TP- 11NJ,K	11 @ 250MHz	± 5, 10	24	3680	0.120	640	10.7	52	11.2	78
LMC 1005TP- 12NJ,K	12 @ 250MHz	± 5, 10	24	3600	0.160	640	11.9	53	12.7	71
LMC 1005TP- 15NJ,K	15 @ 250MHz	± 5, 10	24	3280	0.172	560	14.6	55	15.5	77
LMC 1005TP- 16NJ,K	16 @ 250MHz	± 5, 10	24	3200	0.210	530	16.2	54	19.1	59
LMC 1005TP- 18NJ,K	18 @ 250MHz	± 5, 10	24	3100	0.190	520	18.8	56	21.4	65
LMC 1005TP- 19NJ,K	19 @ 250MHz	± 5, 10	24	3040	0.260	480	19.1	50	21.1	67
LMC 1005TP- 20NJ,K	20 @ 250MHz	± 5, 10	24	2950	0.270	450	20.6	52	24.2	56
LMC 1005TP- 23NJ,K	23 @ 250MHz	± 5, 10	24	2720	0.280	400	23.8	49	26.9	64
LMC 1005TP- 24NJ,K	24 @ 250MHz	± 5, 10	24	2580	0.350	380	26.3	50	32.8	50
LMC 1005TP- 27NJ,K	27 @ 250MHz	± 5, 10	24	2480	0.330	400	28.7	49	33.5	63
LMC 1005TP- 30NJ,K	30 @ 250MHz	± 5, 10	24	2400	0.400	350	31.2	49	42.0	58
LMC 1005TP- 33NJ,K	33 @ 250MHz	± 5, 10	24	2700	0.480	300	35.5	50	47.0	50
LMC 1005TP- 36NJ,K	36 @ 250MHz	± 5, 10	24	2320	0.403	320	39.5	44	48.4	53
LMC 1005TP- 39NJ,K	39 @ 250MHz	± 5, 10	24	2260	0.490	320	41.0	46	49.5	40
LMC 1005TP- 40NJ,K	40 @ 250MHz	± 5, 10	24	2240	0.550	320	39.0	44	47.4	33
LMC 1005TP- 47NJ,K	47 @ 250MHz	± 5, 10	20	2210	0.830	150	50.0	38	-	-
LMC 1005TP- 51NJ,K	51 @ 250MHz	± 5, 10	23	2180	0.850	120	60.5	44	-	-
LMC 1005TP- 56NJ,K	56 @ 250MHz	± 5, 10	22	2160	1.250	100	65.1	42	-	-
LMC 1005TP- 68NJ,K	68 @ 250MHz	± 5, 10	22	2020	1.520	92	78.8	40	-	-
LMC 1005TP- 82NJ,K	82 @ 250MHz	± 5, 10	20	1940	1.630	84	97.8	37	-	-

### 1. How to order

**LM C 1005 TP 1N0 J**  
 (1) (2) (3) (4) (5) (6)

- (1) Part name
- (2) Material
- (3) Body size
- (4) TP: Taping
- (5) Inductance

Ex: 1N0(1.0nH), 7N5(7.5nH), 47N(47nH)

(6) Inductance Tol.

2. Inductance measured: RF LCR METER(HP4287A) + 16197A fixture

3. G= ± 2%, J= ± 5%, K= ± 10%

4. Q measured: RF LCR METER(Agilent4287A) + 16197A fixture

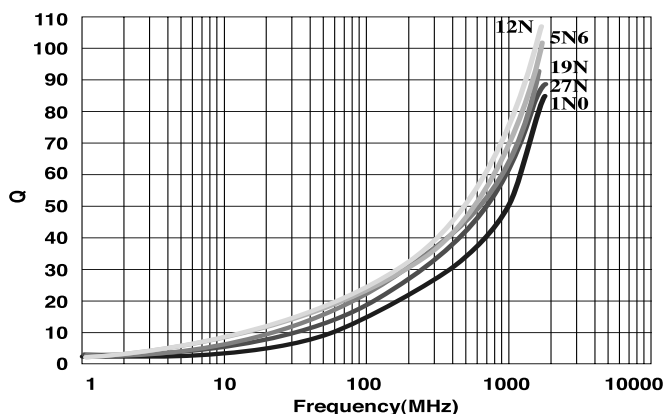
5. SRF measured: NETWORK ANALYZER(HP8753D) + ABCO SMD-D test fixture

6. Rdc measured: RF LCR METER(HP4287A) + 16197A fixture

7. For 15°C Rise

## ■ ELECTRICAL CHARACTERISTICS

### ● Q vs F Characteristic



### ● L vs F Characteristic

