

# Multilayer Chip Inductors(Coils)

For High Frequency

## MLG (Horizontal Winding) series

Type:	MLG0402Q	[01005 inch]*(Qup Type)
	MLG0603P	[0201 inch] (High-Q type)
	MLG0603S	[0201 inch] (STD)
	MLG1005S	[0402 inch] (STD)
	MLG1608	[0603 inch] (STD)

\* Dimensions Code JIS[EIA]

Issue date: May 2011

- All specifications are subject to change without notice.
  - Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.
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# SMD Inductors(Coils) For High Frequency(Multilayer)

Conformity to RoHS Directive

## MLG Series MLG0402Q

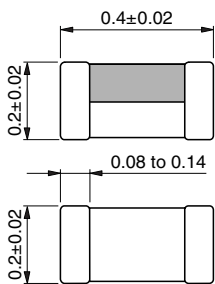
### FEATURES

- Inductance values are supported from 1 to 15nH.
- Compared to our existing 0603 product, this series has a 30% smaller cubic ratio and 45% smaller effective area, making it the optimal product for fine-pitch circuits.
- Guaranteed operating temperature range:  $-55$  to  $+125^{\circ}\text{C}$
- The products contain no lead and also support lead-free soldering.
- It is a product conforming to RoHS directive.

### APPLICATIONS

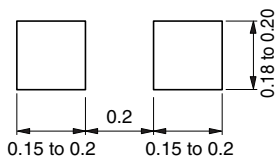
For high-frequency applications including mobile phones, high frequency modules (PA, VCO, FEM etc.), Bluetooth, W-LAN, UWB and tuners.

### SHAPES AND DIMENSIONS



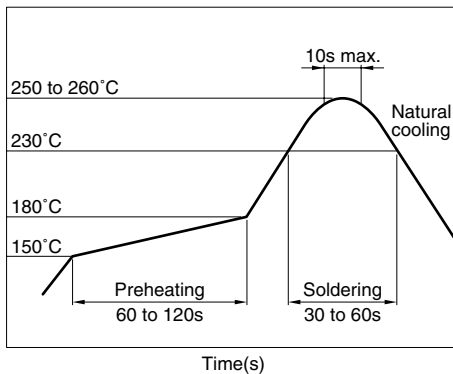
Weight: 0.07mg  
Dimensions in mm

### RECOMMENDED PC BOARD PATTERN



Dimensions in mm

### RECOMMENDED SOLDERING CONDITION REFLOW SOLDERING



- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

- Please contact our Sales office when your application is considered the following:  
The device's failure or malfunction may directly endanger human life (e.g. application for automobile/aircraft/medical/nuclear power devices, etc.)

- All specifications are subject to change without notice.

### PRODUCT IDENTIFICATION

MLG	0402	Q	2N2	S	T
(1)	(2)	(3)	(4)	(5)	(6)

(1) Series name

(2) Dimensions

0402 0.4×0.2mm(L×W)

(3) Material code

(4) Inductance value

2N2	2.2nH
12N	12nH

(5) Inductance tolerance

S	$\pm 0.3\text{nH}$
J	$\pm 5\%$

(6) Packaging style

T Taping (reel)

### SPECIFICATIONS

Operating temperature range	$-55$ to $+125^{\circ}\text{C}$
Storage temperature range	$-55$ to $+125^{\circ}\text{C}$

### PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	20000 pieces/reel

### HANDLING AND PRECAUTIONS

- Before soldering, be sure to preheat components.  
The preheating temperature should be set so that the temperature difference between the solder temperature and product temperature does not exceed  $150^{\circ}\text{C}$ .
- After mounting components onto the printed circuit board, do not apply stress through board bending or mishandling.

## ELECTRICAL CHARACTERISTICS

Inductance (nH)	Inductance tolerance	Q min.	Test frequency L, Q (MHz)	Self-resonant frequency (GHz)		DC resistance ( $\Omega$ )		Rated current (mA)max.	Part No.
				min.	typ.	max.	typ.		
1.0	$\pm 0.3\text{nH}$	2	100	10.0	16.8	0.40	0.20	250	MLG0402Q1N0ST
1.1	$\pm 0.3\text{nH}$	2	100	10.0	16.6	0.50	0.22	250	MLG0402Q1N1ST
1.2	$\pm 0.3\text{nH}$	2	100	10.0	16.2	0.50	0.25	250	MLG0402Q1N2ST
1.3	$\pm 0.3\text{nH}$	2	100	10.0	16.0	0.60	0.28	250	MLG0402Q1N3ST
1.5	$\pm 0.3\text{nH}$	2	100	10.0	15.6	0.60	0.37	200	MLG0402Q1N5ST
1.6	$\pm 0.3\text{nH}$	2	100	10.0	14.4	0.60	0.25	200	MLG0402Q1N6ST
1.8	$\pm 0.3\text{nH}$	2	100	10.0	13.9	0.60	0.28	200	MLG0402Q1N8ST
2.0	$\pm 0.3\text{nH}$	2	100	9.0	12.5	0.60	0.30	200	MLG0402Q2N0ST
2.2	$\pm 0.3\text{nH}$	2	100	8.0	11.7	0.80	0.43	200	MLG0402Q2N2ST
2.4	$\pm 0.3\text{nH}$	2	100	7.0	10.9	0.80	0.43	200	MLG0402Q2N4ST
2.7	$\pm 0.3\text{nH}$	2	100	7.0	10.7	0.80	0.54	200	MLG0402Q2N7ST
3.0	$\pm 0.3\text{nH}$	2	100	7.0	10.0	0.80	0.45	200	MLG0402Q3N0ST
3.3	$\pm 0.3\text{nH}$	2	100	7.0	10.0	1.10	0.73	150	MLG0402Q3N3ST
3.6	$\pm 0.3\text{nH}$	2	100	6.0	9.0	1.10	0.75	150	MLG0402Q3N6ST
3.9	$\pm 0.3\text{nH}$	2	100	6.0	8.8	1.20	0.77	150	MLG0402Q3N9ST
4.3	$\pm 0.3\text{nH}$	2	100	6.0	8.6	1.20	0.77	150	MLG0402Q4N3ST
4.7	$\pm 0.3\text{nH}$	2	100	5.5	8.1	1.30	0.88	120	MLG0402Q4N7ST
5.1	$\pm 0.3\text{nH}$	2	100	5.5	7.8	1.40	0.90	120	MLG0402Q5N1ST
5.6	$\pm 0.3\text{nH}$	2	100	5.5	7.8	1.50	1.02	120	MLG0402Q5N6ST
6.2	$\pm 0.3\text{nH}$	2	100	5.0	7.2	1.50	1.04	120	MLG0402Q6N2ST
6.8	$\pm 5\%$	2	100	5.0	6.9	1.60	1.12	120	MLG0402Q6N8JT
7.5	$\pm 5\%$	2	100	5.0	6.7	1.70	1.13	120	MLG0402Q7N5JT
8.2	$\pm 5\%$	2	100	4.5	6.2	1.80	1.16	120	MLG0402Q8N2JT
9.1	$\pm 5\%$	2	100	4.0	5.7	1.80	1.20	120	MLG0402Q9N1JT
10	$\pm 5\%$	3	100	3.5	5.3	2.10	1.45	100	MLG0402Q10NJT
12	$\pm 5\%$	3	100	3.0	4.8	2.40	1.64	100	MLG0402Q12NJT
15	$\pm 5\%$	3	100	3.0	4.5	2.60	1.77	100	MLG0402Q15NJT

• Test equipment

Inductance Q : HP4291A+16196D, or equivalent

SRF: HP8720C, or equivalent

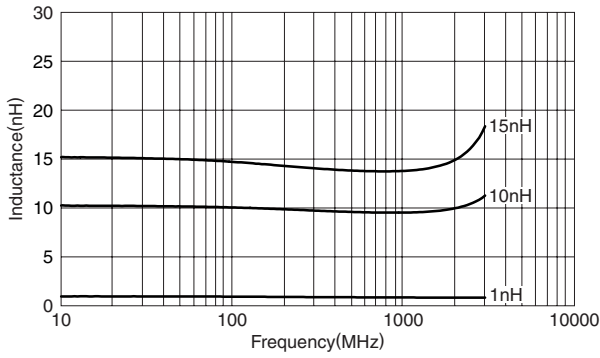
Rdc: HP4338A, or equivalent

## L, Q vs. FREQUENCY CHARACTERISTICS

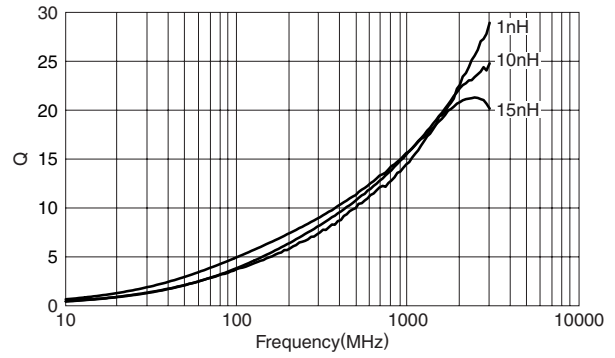
Part No.	Inductance(nH)typ.					Q typ.				
	500MHz	800MHz	1.8GHz	2.0GHz	2.4GHz	500MHz	800MHz	1.8GHz	2.0GHz	2.4GHz
MLG0402Q1N0	0.9	0.9	0.9	0.9	0.9	10	12	20	22	25
MLG0402Q1N1	1.0	1.0	1.0	1.0	1.0	9	12	20	22	25
MLG0402Q1N2	1.1	1.1	1.1	1.1	1.1	9	12	20	21	24
MLG0402Q1N3	1.2	1.2	1.2	1.2	1.2	9	12	20	22	25
MLG0402Q1N5	1.4	1.4	1.4	1.4	1.4	9	12	19	21	23
MLG0402Q1N6	1.5	1.5	1.4	1.4	1.4	10	13	22	23	26
MLG0402Q1N8	1.7	1.6	1.6	1.6	1.6	11	14	22	24	27
MLG0402Q2N0	1.9	1.8	1.8	1.8	1.8	10	13	21	23	26
MLG0402Q2N2	2.1	2.1	2.0	2.0	2.0	10	14	22	24	27
MLG0402Q2N4	2.3	2.3	2.2	2.2	2.2	9	13	21	22	25
MLG0402Q2N7	2.5	2.5	2.5	2.5	2.5	10	13	21	23	25
MLG0402Q3N0	2.8	2.8	2.7	2.7	2.8	10	13	20	21	23
MLG0402Q3N3	3.2	3.1	3.1	3.1	3.1	9	12	19	21	23
MLG0402Q3N6	3.4	3.4	3.4	3.4	3.4	10	13	20	22	24
MLG0402Q3N9	3.7	3.7	3.7	3.7	3.7	9	12	19	20	22
MLG0402Q4N3	4.1	4.0	4.0	4.0	4.1	10	13	21	23	25
MLG0402Q4N7	4.5	4.5	4.5	4.5	4.6	10	13	21	23	25
MLG0402Q5N1	4.8	4.8	4.8	4.8	4.9	10	13	20	22	24
MLG0402Q5N6	5.3	5.3	5.3	5.3	5.4	11	14	22	23	25
MLG0402Q6N2	5.9	5.8	5.9	5.9	6.0	11	14	21	23	25
MLG0402Q6N8	6.5	6.4	6.5	6.6	6.7	10	13	21	22	23
MLG0402Q7N5	7.1	7.0	7.1	7.2	7.4	11	14	22	23	25
MLG0402Q8N2	7.8	7.8	7.9	8.0	8.3	11	14	21	23	24
MLG0402Q9N1	8.6	8.5	8.7	8.8	9.1	11	14	21	23	24
MLG0402Q10N	9.5	9.5	9.8	9.9	10.3	11	14	21	22	23
MLG0402Q12N	11.4	11.4	11.9	12.2	12.8	11	13	20	21	21
MLG0402Q15N	14.1	14.0	14.8	15.2	16.2	11	14	20	21	21

• All specifications are subject to change without notice.

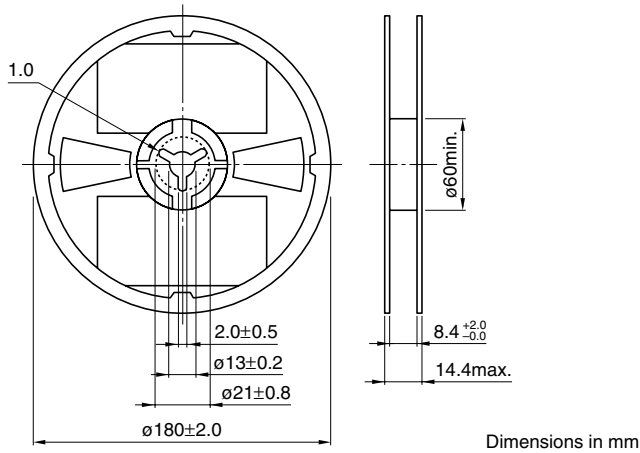
### TYPICAL ELECTRICAL CHARACTERISTICS INDUCTANCE vs. FREQUENCY CHARACTERISTICS



### Q vs. FREQUENCY CHARACTERISTICS

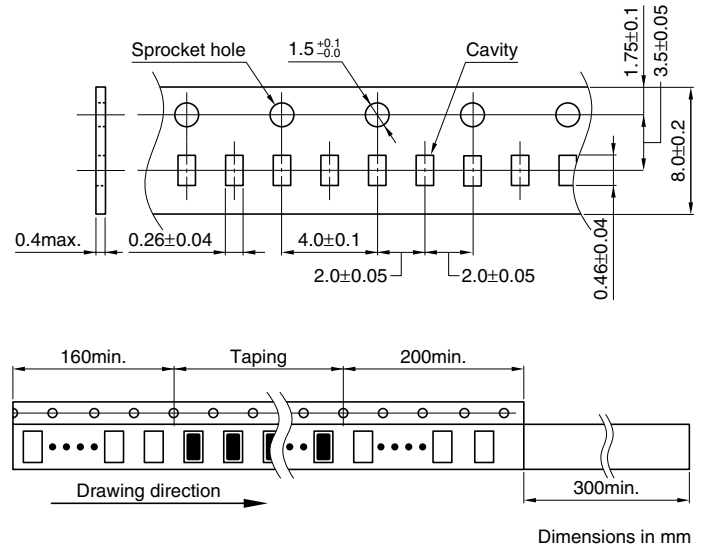


### PACKAGING STYLES REEL DIMENSIONS



Dimensions in mm

### TAPE DIMENSIONS



Dimensions in mm

• All specifications are subject to change without notice.

# SMD Inductors(Coils) For High Frequency(Multilayer)

Conformity to RoHS Directive

## MLG Series MLG0603P Type

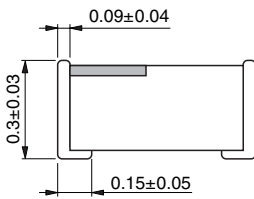
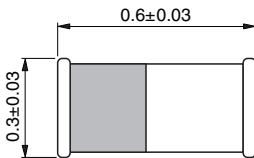
### FEATURES

- It serializes a product of inductance 0.6 to 120nH.
- By the most suitable design, Q is higher than competing in a conventional product MLG0603S type. In particular, Q in more than 800MHz largely improved.
- Advanced monolithic structure is formed using a multilayering and sintering process with ceramic and conductive materials for high-frequency.
- The products contain no lead and also support lead-free soldering.
- It is a product conforming to RoHS directive.

### APPLICATIONS

For high-frequency applications including mobile phones, high frequency modules (PA, VCO, FEM etc.), Bluetooth, W-LAN, UWB and tuners.

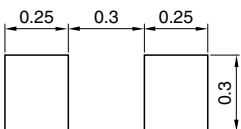
### SHAPES AND DIMENSIONS



Weight: 0.2mg

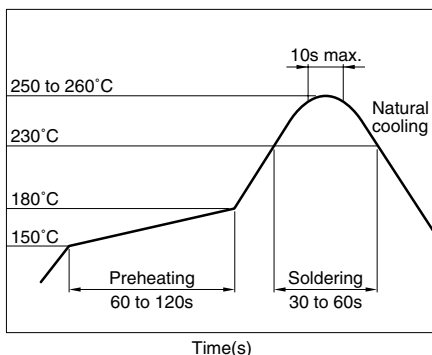
Dimensions in mm

### RECOMMENDED PC BOARD PATTERN



Dimensions in mm

### RECOMMENDED SOLDERING CONDITION REFLOW SOLDERING



### PRODUCT IDENTIFICATION

MLG	0603	P	2N2	S	T
(1)	(2)	(3)	(4)	(5)	(6)

(1) Series name

(2) Dimensions

0603 0.6×0.3mm (L×W)

(3) Material code

(4) Inductance value

2N2	2.2nH
12N	12nH

(5) Inductance tolerance

B	±0.1nH
C	±0.2nH
S	±0.3nH
H	±3%
J	±5%

(6) Packaging style

T Taping (reel)

### SPECIFICATIONS

Operating temperature range	-55 to +125°C
Storage temperature range	-55 to +125°C

### PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	15000 pieces/reel

### HANDLING AND PRECAUTIONS

- Before soldering, be sure to preheat components.  
The preheating temperature should be set so that the temperature difference between the solder temperature and product temperature does not exceed 150°C.
- After mounting components onto the printed circuit board, do not apply stress through board bending or mishandling.
- When hand soldering, apply the soldering iron to the printed circuit board only. Temperature of the iron tip should not exceed 350°C. Soldering time should not exceed 3 seconds.

• Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

• Please contact our Sales office when your application is considered the following:

The device's failure or malfunction may directly endanger human life (e.g. application for automobile/aircraft/medical/nuclear power devices, etc.)

• All specifications are subject to change without notice.

**ELECTRICAL CHARACTERISTICS**

Inductance (nH)	Inductance tolerance	Q min.	Test frequency L, Q (MHz)	Self-resonant frequency (GHz)		DC resistance ( $\Omega$ )		Rated current (mA)max.	Part No.*
				min.	typ.	max.	typ.		
0.6	$\pm 0.1, \pm 0.2$ nH	—	500	10.0	20.0	0.06	0.01	1000	MLG0603P0N6□
0.7	$\pm 0.1, \pm 0.2$ nH	—	500	10.0	20.0	0.06	0.01	1000	MLG0603P0N7□
0.8	$\pm 0.1, \pm 0.2$ nH	—	500	10.0	20.0	0.06	0.02	1000	MLG0603P0N8□
0.9	$\pm 0.1, \pm 0.2$ nH	—	500	10.0	20.0	0.06	0.02	1000	MLG0603P0N9□
1.0	$\pm 0.1, \pm 0.2, \pm 0.3$ nH	14	500	10.0	20.0	0.07	0.02	1000	MLG0603P1N0□
1.1	$\pm 0.1, \pm 0.2, \pm 0.3$ nH	14	500	10.0	19.9	0.07	0.03	1000	MLG0603P1N1□
1.2	$\pm 0.1, \pm 0.2, \pm 0.3$ nH	14	500	10.0	16.0	0.08	0.04	800	MLG0603P1N2□
1.3	$\pm 0.1, \pm 0.2, \pm 0.3$ nH	14	500	10.0	13.9	0.08	0.03	800	MLG0603P1N3□
1.4	$\pm 0.1, \pm 0.2, \pm 0.3$ nH	14	500	10.0	11.7	0.09	0.04	800	MLG0603P1N4□
1.5	$\pm 0.1, \pm 0.2, \pm 0.3$ nH	14	500	10.0	14.9	0.10	0.03	800	MLG0603P1N5□
1.6	$\pm 0.1, \pm 0.2, \pm 0.3$ nH	14	500	10.0	13.4	0.10	0.03	700	MLG0603P1N6□
1.7	$\pm 0.1, \pm 0.2, \pm 0.3$ nH	14	500	10.0	12.8	0.10	0.02	700	MLG0603P1N7□
1.8	$\pm 0.1, \pm 0.2, \pm 0.3$ nH	14	500	9.0	10.7	0.10	0.03	700	MLG0603P1N8□
1.9	$\pm 0.1, \pm 0.2, \pm 0.3$ nH	14	500	9.0	10.9	0.10	0.04	600	MLG0603P1N9□
2.0	$\pm 0.1, \pm 0.2, \pm 0.3$ nH	14	500	8.5	10.1	0.10	0.03	600	MLG0603P2N0□
2.1	$\pm 0.1, \pm 0.2, \pm 0.3$ nH	14	500	8.0	9.8	0.10	0.05	600	MLG0603P2N1□
2.2	$\pm 0.1, \pm 0.2, \pm 0.3$ nH	14	500	7.5	9.0	0.10	0.07	600	MLG0603P2N2□
2.3	$\pm 0.1, \pm 0.2, \pm 0.3$ nH	14	500	7.5	8.4	0.20	0.07	600	MLG0603P2N3□
2.4	$\pm 0.1, \pm 0.2, \pm 0.3$ nH	14	500	7.5	10.9	0.20	0.12	500	MLG0603P2N4□
2.5	$\pm 0.1, \pm 0.2, \pm 0.3$ nH	14	500	7.5	9.9	0.20	0.09	500	MLG0603P2N5□
2.6	$\pm 0.1, \pm 0.2, \pm 0.3$ nH	14	500	7.5	10.1	0.20	0.14	500	MLG0603P2N6□
2.7	$\pm 0.1, \pm 0.2, \pm 0.3$ nH	14	500	7.5	10.0	0.20	0.14	500	MLG0603P2N7□
2.8	$\pm 0.1, \pm 0.2, \pm 0.3$ nH	14	500	7.5	9.9	0.20	0.10	500	MLG0603P2N8□
2.9	$\pm 0.1, \pm 0.2, \pm 0.3$ nH	14	500	7.5	9.2	0.20	0.10	500	MLG0603P2N9□
3.0	$\pm 0.1, \pm 0.2, \pm 0.3$ nH	14	500	7.5	9.1	0.20	0.14	450	MLG0603P3N0□
3.1	$\pm 0.1, \pm 0.2, \pm 0.3$ nH	14	500	7.5	8.8	0.20	0.10	450	MLG0603P3N1□
3.2	$\pm 0.1, \pm 0.2, \pm 0.3$ nH	14	500	7.5	8.4	0.20	0.14	450	MLG0603P3N2□
3.3	$\pm 0.1, \pm 0.2, \pm 0.3$ nH	14	500	7.5	8.4	0.20	0.13	450	MLG0603P3N3□
3.4	$\pm 0.1, \pm 0.2, \pm 0.3$ nH	14	500	7.0	8.1	0.20	0.13	450	MLG0603P3N4□
3.5	$\pm 0.1, \pm 0.2, \pm 0.3$ nH	14	500	6.5	8.0	0.20	0.12	450	MLG0603P3N5□
3.6	$\pm 0.1, \pm 0.2, \pm 0.3$ nH	14	500	6.5	7.7	0.20	0.10	400	MLG0603P3N6□
3.7	$\pm 0.1, \pm 0.2, \pm 0.3$ nH	14	500	6.5	7.4	0.20	0.14	400	MLG0603P3N7□
3.8	$\pm 0.1, \pm 0.2, \pm 0.3$ nH	14	500	5.8	7.0	0.30	0.24	400	MLG0603P3N8□
3.9	$\pm 0.1, \pm 0.2, \pm 0.3$ nH	14	500	5.8	7.1	0.30	0.22	400	MLG0603P3N9□
4.3	$\pm 3, \pm 5\%, \pm 0.3$ nH	14	500	5.8	6.7	0.40	0.24	350	MLG0603P4N3□
4.7	$\pm 3, \pm 5\%, \pm 0.3$ nH	14	500	5.5	6.9	0.40	0.16	350	MLG0603P4N7□
5.1	$\pm 3, \pm 5\%, \pm 0.3$ nH	14	500	5.5	6.6	0.40	0.30	350	MLG0603P5N1□
5.6	$\pm 3, \pm 5\%, \pm 0.3$ nH	14	500	4.0	5.3	0.40	0.32	350	MLG0603P5N6□
6.2	$\pm 3, \pm 5\%, \pm 0.3$ nH	14	500	4.0	6.3	0.90	0.59	300	MLG0603P6N2□
6.8	$\pm 3, \pm 5\%$	14	500	4.0	6.1	0.90	0.62	300	MLG0603P6N8□
7.5	$\pm 3, \pm 5\%$	14	500	4.0	5.4	1.00	0.70	300	MLG0603P7N5□
8.2	$\pm 3, \pm 5\%$	14	500	4.0	5.2	1.00	0.71	250	MLG0603P8N2□
9.1	$\pm 3, \pm 5\%$	14	500	4.0	5.0	1.10	0.76	250	MLG0603P9N1□
10	$\pm 3, \pm 5\%$	14	500	4.0	4.7	1.20	0.85	250	MLG0603P10N□
12	$\pm 3, \pm 5\%$	14	500	3.5	4.3	1.30	0.82	180	MLG0603P12N□
15	$\pm 3, \pm 5\%$	14	500	3.2	3.7	1.40	0.94	170	MLG0603P15N□
18	$\pm 3, \pm 5\%$	14	500	3.0	3.5	1.50	1.04	160	MLG0603P18N□
22	$\pm 3, \pm 5\%$	14	500	2.2	2.9	1.90	1.31	150	MLG0603P22N□
27	$\pm 3, \pm 5\%$	14	500	2.2	2.7	2.10	1.45	140	MLG0603P27N□
33	$\pm 3, \pm 5\%$	10	300	1.8	2.4	2.20	1.55	130	MLG0603P33N□
39	$\pm 3, \pm 5\%$	10	300	1.8	2.2	2.40	1.72	120	MLG0603P39N□
47	$\pm 3, \pm 5\%$	10	300	1.6	2.0	2.90	2.18	110	MLG0603P47N□
56	$\pm 3, \pm 5\%$	10	300	1.4	1.8	3.50	2.35	100	MLG0603P56N□
68	$\pm 3, \pm 5\%$	9	300	1.2	1.6	3.50	2.69	100	MLG0603P68N□
82	$\pm 3, \pm 5\%$	9	300	1.0	1.5	4.00	2.71	80	MLG0603P82N□
100	$\pm 3, \pm 5\%$	9	300	0.9	1.3	4.50	3.20	80	MLG0603PR10□
120	$\pm 3, \pm 5\%$	9	300	0.8	1.0	5.00	3.79	80	MLG0603PR12□

\* □: Please specify inductance tolerance, B ( $\pm 0.1$ nH), C ( $\pm 0.2$ nH), S ( $\pm 0.3$ nH), H ( $\pm 3\%$ ) or J ( $\pm 5\%$ ).

• Test equipment

Inductance Q : HP4291A+16197A, or equivalent

SRF: HP8720C, or equivalent

Rdc: YOKOGAWA TYPE7561, or equivalent

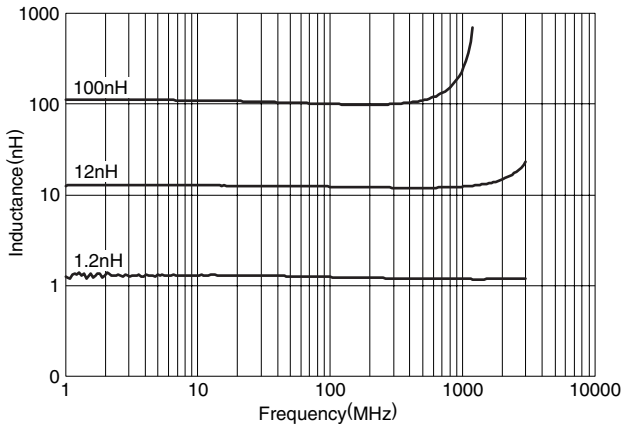
• Short bar residual inductance =0.43nH

• All specifications are subject to change without notice.

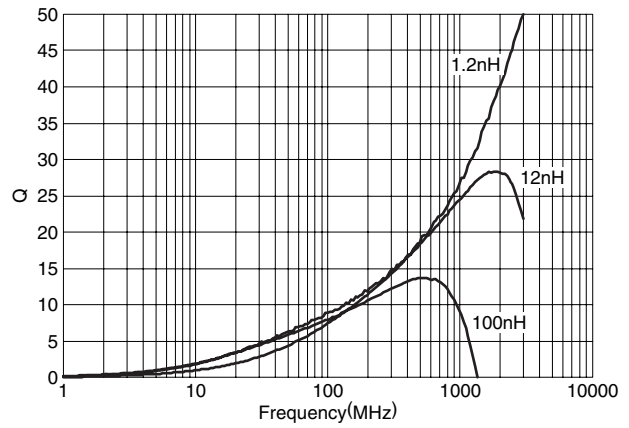
**L, Q vs. FREQUENCY CHARACTERISTICS**

Part No.	Inductance(nH)typ.					Q typ.				
	500MHz	800MHz	1.8GHz	2.0GHz	2.4GHz	500MHz	800MHz	1.8GHz	2.0GHz	2.4GHz
MLG0603P0N6	0.6	0.6	0.6	0.6	0.6	16min.	22min.	35min.	37min.	41min.
MLG0603P0N7	0.7	0.7	0.7	0.7	0.7	16min.	22min.	35min.	37min.	41min.
MLG0603P0N8	0.8	0.8	0.8	0.8	0.4	16	22	35	37	41
MLG0603P0N9	0.9	0.9	0.9	0.9	0.9	17	22	35	37	41
MLG0603P1N0	1.0	1.0	1.0	1.0	1.0	16	21	33	36	40
MLG0603P1N1	1.1	1.1	1.1	1.1	1.1	17	23	36	38	43
MLG0603P1N2	1.2	1.2	1.2	1.2	1.2	18	24	38	40	45
MLG0603P1N3	1.3	1.3	1.3	1.3	1.3	17	22	34	36	40
MLG0603P1N4	1.4	1.4	1.4	1.4	1.4	18	23	36	39	43
MLG0603P1N5	1.5	1.5	1.5	1.5	1.5	17	22	33	35	39
MLG0603P1N6	1.6	1.6	1.6	1.6	1.6	17	22	33	35	38
MLG0603P1N7	1.7	1.7	1.7	1.7	1.7	17	22	33	35	39
MLG0603P1N8	1.8	1.8	1.8	1.8	1.8	17	22	34	35	39
MLG0603P1N9	1.9	1.9	1.9	1.9	1.9	18	24	36	38	42
MLG0603P2N0	2.0	2.0	2.0	2.0	2.0	19	23	35	37	41
MLG0603P2N1	2.1	2.1	2.1	2.1	2.1	18	23	34	36	39
MLG0603P2N2	2.2	2.2	2.2	2.2	2.3	18	23	35	36	40
MLG0603P2N3	2.3	2.3	2.3	2.4	2.4	18	22	33	35	38
MLG0603P2N4	2.4	2.4	2.4	2.4	2.4	16	21	31	33	36
MLG0603P2N5	2.5	2.5	2.5	2.5	2.5	17	22	33	34	38
MLG0603P2N6	2.6	2.6	2.6	2.6	2.6	17	22	33	35	38
MLG0603P2N7	2.7	2.7	2.7	2.7	2.7	17	21	33	35	38
MLG0603P2N8	2.8	2.8	2.8	2.8	2.9	17	22	34	36	40
MLG0603P2N9	2.9	2.9	2.9	2.9	3.0	17	22	34	35	39
MLG0603P3N0	3.0	3.0	3.0	3.1	3.1	17	21	32	34	37
MLG0603P3N1	3.1	3.1	3.1	3.2	3.2	17	22	33	34	37
MLG0603P3N2	3.2	3.2	3.2	3.3	3.3	17	22	34	35	38
MLG0603P3N3	3.3	3.3	3.4	3.4	3.4	18	22	33	35	38
MLG0603P3N4	3.4	3.4	3.5	3.5	3.6	18	23	34	35	38
MLG0603P3N5	3.5	3.5	3.6	3.6	3.7	18	23	34	35	38
MLG0603P3N6	3.6	3.6	3.7	3.7	3.8	18	22	33	34	37
MLG0603P3N7	3.7	3.7	3.8	3.9	4.0	18	23	34	35	37
MLG0603P3N8	3.8	3.8	3.9	4.0	4.1	17	22	32	33	36
MLG0603P3N9	3.9	3.9	4.0	4.1	4.2	17	22	32	34	36
MLG0603P4N3	4.3	4.3	4.5	4.5	4.7	17	21	32	33	35
MLG0603P4N7	4.7	4.7	4.9	5.0	5.1	16	21	31	32	34
MLG0603P5N1	5.1	5.1	5.3	5.4	5.7	16	21	31	32	34
MLG0603P5N6	5.6	5.6	6.1	6.2	6.6	18	22	31	32	32
MLG0603P6N2	6.2	6.2	6.5	6.7	7.0	16	21	30	31	33
MLG0603P6N8	6.8	6.8	7.3	7.5	8.0	16	21	29	30	31
MLG0603P7N5	7.5	7.5	8.1	8.3	8.8	16	21	30	30	32
MLG0603P8N2	8.2	8.2	9.0	9.3	10.0	17	21	30	30	31
MLG0603P9N1	9.1	9.1	10.0	10.3	11.1	17	21	30	31	32
MLG0603P10N	10.0	10.1	11.2	11.7	12.9	16	21	28	28	28
MLG0603P12N	12.0	12.2	14.1	14.9	17.0	18	22	28	28	27
MLG0603P15N	15.0	15.3	18.4	19.9	23.8	18	22	27	26	24
MLG0603P18N	18.0	18.4	23.3	25.8	33.0	18	22	25	24	20
MLG0603P22N	22.0	22.9	33.6	40.2	67.7	18	21	21	18	11
MLG0603P27N	27.0	28.3	45.1	57.1		18	21	18	15	
MLG0603P33N	33.4	35.5	68.3			15	17	11		
MLG0603P39N	39.7	42.8				15	17			
MLG0603P47N	48.2	53.0				15	16			
MLG0603P56N	58.0	65.9				15	15			
MLG0603P68N	70.9	82.1				15	15			
MLG0603P82N	87.4	109.0				14	13			
MLG0603PR10	109.6	152.0				14	12			
MLG0603PR12	150.8					12				

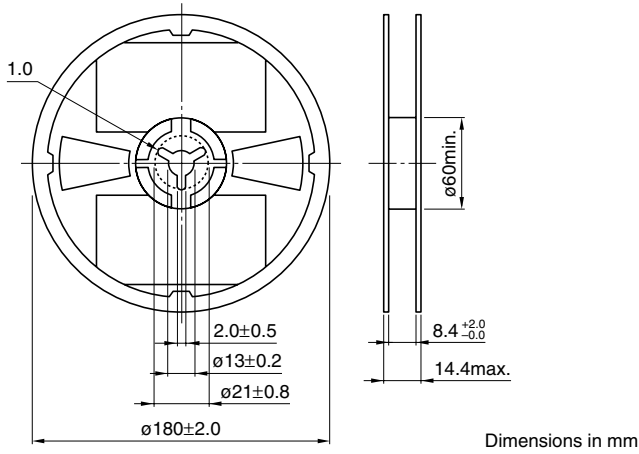
### TYPICAL ELECTRICAL CHARACTERISTICS INDUCTANCE vs. FREQUENCY CHARACTERISTICS



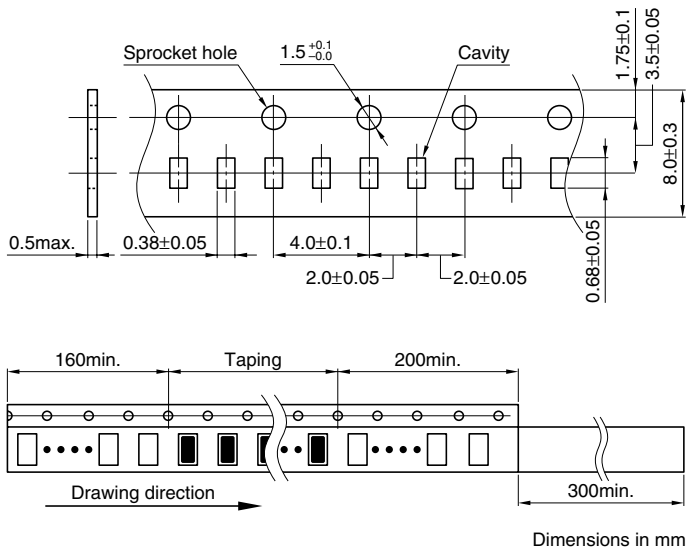
### Q vs. FREQUENCY CHARACTERISTICS



### PACKAGING STYLES REEL DIMENSIONS



### TAPE DIMENSIONS



• All specifications are subject to change without notice.



# SMD Inductors(Coils) For High Frequency(Multilayer)

Conformity to RoHS Directive

## MLG Series MLG0603S

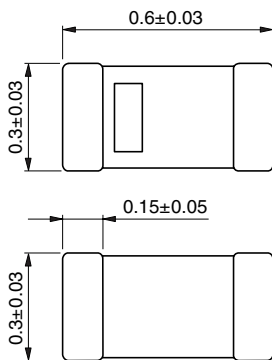
### FEATURES

- Inductance values are supported from 0.3 to 100nH.
- Advanced monolithic structure is formed using a multilayering and sintering process with ceramic and conductive materials for high-frequency.
- The products contain no lead and also support lead-free soldering.
- It is a product conforming to RoHS directive.

### APPLICATIONS

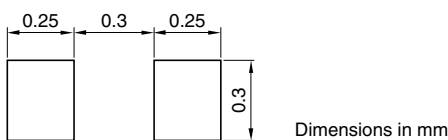
For high-frequency applications including mobile phones, high frequency modules (PA, VCO, FEM etc.), Bluetooth, W-LAN, UWB and tuners.

### SHAPES AND DIMENSIONS

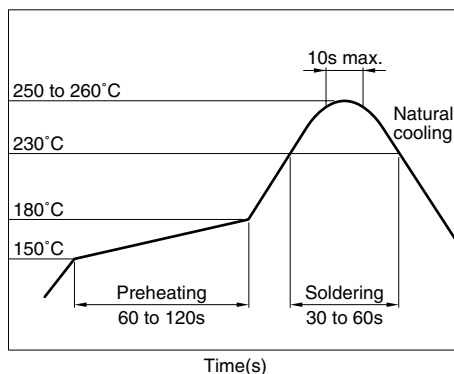


Weight: 0.2mg

### RECOMMENDED PC BOARD PATTERN



### RECOMMENDED SOLDERING CONDITION REFLOW SOLDERING



- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

- Please contact our Sales office when your application is considered the following:  
The device's failure or malfunction may directly endanger human life (e.g. application for automobile/aircraft/medical/nuclear power devices, etc.)

- All specifications are subject to change without notice.

### PRODUCT IDENTIFICATION

MLG	0603	S	2N2	S	T
(1)	(2)	(3)	(4)	(5)	(6)

(1) Series name

(2) Dimensions

0603	0.6×0.3mm (L×W)
------	-----------------

(3) Material code

(4) Inductance value

2N2	2.2nH
12N	12nH
R10	100nH

(5) Inductance tolerance

B	±0.1nH
C	±0.2nH
S	±0.3nH
H	±3%
J	±5%

(6) Packaging style

T	Taping (reel)
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### SPECIFICATIONS

Operating temperature range	-55 to +125°C
Storage temperature range	-55 to +125°C

### PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	15000 pieces/reel

### HANDLING AND PRECAUTIONS

- Before soldering, be sure to preheat components.  
The preheating temperature should be set so that the temperature difference between the solder temperature and product temperature does not exceed 150°C.
- After mounting components onto the printed circuit board, do not apply stress through board bending or mishandling.
- When hand soldering, apply the soldering iron to the printed circuit board only. Temperature of the iron tip should not exceed 350°C. Soldering time should not exceed 3 seconds.

**ELECTRICAL CHARACTERISTICS**

Inductance (nH)	Inductance tolerance	Q min.	Test frequency L, Q (MHz)	Self-resonant frequency (GHz)		DC resistance ( $\Omega$ )		Rated current (mA)max.	Part No.*
				min.	typ.	max.	typ.		
0.3	$\pm 0.1, \pm 0.2\text{nH}$	—	100	10.0	20 up	0.1	0.02	600	MLG0603S0N3□T
0.4	$\pm 0.1, \pm 0.2\text{nH}$	—	100	10.0	20 up	0.1	0.02	600	MLG0603S0N4□T
0.5	$\pm 0.1, \pm 0.2\text{nH}$	—	100	10.0	20 up	0.1	0.02	600	MLG0603S0N5□T
0.6	$\pm 0.1, \pm 0.2\text{nH}$	—	100	10.0	20 up	0.1	0.02	600	MLG0603S0N6□T
0.7	$\pm 0.1, \pm 0.2\text{nH}$	—	100	10.0	16.3	0.1	0.02	600	MLG0603S0N7□T
0.8	$\pm 0.1, \pm 0.2\text{nH}$	—	100	10.0	16.1	0.1	0.03	600	MLG0603S0N8□T
0.9	$\pm 0.1, \pm 0.2\text{nH}$	—	100	10.0	13.8	0.1	0.03	600	MLG0603S0N9□T
1.0	$\pm 0.1, \pm 0.2, 0.3\text{nH}$	4	100	10.0	14.4	0.1	0.04	600	MLG0603S1N0□T
1.1	$\pm 0.1, \pm 0.2, 0.3\text{nH}$	4	100	10.0	13.6	0.15	0.04	550	MLG0603S1N1□T
1.2	$\pm 0.1, \pm 0.2, 0.3\text{nH}$	4	100	10.0	12.3	0.15	0.06	550	MLG0603S1N2□T
1.3	$\pm 0.1, \pm 0.2, 0.3\text{nH}$	4	100	9.0	11.4	0.15	0.07	550	MLG0603S1N3□T
1.5	$\pm 0.1, \pm 0.2, 0.3\text{nH}$	4	100	9.0	10.4	0.15	0.07	550	MLG0603S1N5□T
1.6	$\pm 0.1, \pm 0.2, 0.3\text{nH}$	4	100	9.0	11.5	0.2	0.09	500	MLG0603S1N6□T
1.8	$\pm 0.1, \pm 0.2, 0.3\text{nH}$	4	100	8.5	10.0	0.2	0.12	500	MLG0603S1N8□T
2.0	$\pm 0.1, \pm 0.2, 0.3\text{nH}$	4	100	8.2	9.8	0.25	0.14	400	MLG0603S2N0□T
2.2	$\pm 0.1, \pm 0.2, 0.3\text{nH}$	4	100	8.0	8.9	0.25	0.14	400	MLG0603S2N2□T
2.4	$\pm 0.1, \pm 0.2, 0.3\text{nH}$	4	100	8.0	9.2	0.25	0.15	300	MLG0603S2N4□T
2.7	$\pm 0.1, \pm 0.2, 0.3\text{nH}$	4	100	6.5	8.1	0.25	0.15	300	MLG0603S2N7□T
3.0	$\pm 0.1, \pm 0.2, 0.3\text{nH}$	4	100	6.2	7.8	0.3	0.20	300	MLG0603S3N0□T
3.3	$\pm 0.1, \pm 0.2, 0.3\text{nH}$	4	100	5.8	7.0	0.35	0.23	300	MLG0603S3N3□T
3.6	$\pm 0.1, \pm 0.2, 0.3\text{nH}$	4	100	5.5	6.9	0.35	0.22	300	MLG0603S3N6□T
3.9	$\pm 0.1, \pm 0.2, 0.3\text{nH}$	5	100	5.0	6.6	0.4	0.27	300	MLG0603S3N9□T
4.3	$\pm 3\%, \pm 0.3\text{nH}$	5	100	5.0	6.4	0.4	0.27	300	MLG0603S4N3□T
4.7	$\pm 3\%, \pm 0.3\text{nH}$	5	100	4.5	5.4	0.45	0.28	300	MLG0603S4N7□T
5.1	$\pm 3\%, \pm 0.3\text{nH}$	5	100	4.5	5.5	0.45	0.23	250	MLG0603S5N1□T
5.6	$\pm 3\%, \pm 0.3\text{nH}$	5	100	4.2	5.3	0.5	0.31	250	MLG0603S5N6□T
6.2	$\pm 3\%, \pm 0.3\text{nH}$	5	100	4.2	5.1	0.55	0.32	250	MLG0603S6N2□T
6.8	$\pm 3, \pm 5\%$	5	100	3.6	4.4	0.6	0.32	250	MLG0603S6N8□T
7.5	$\pm 3, \pm 5\%$	5	100	4.2	5.3	0.7	0.43	200	MLG0603S7N5□T
8.2	$\pm 3, \pm 5\%$	5	100	3.8	4.5	0.7	0.45	200	MLG0603S8N2□T
9.1	$\pm 3, \pm 5\%$	5	100	3.4	4.9	0.8	0.51	200	MLG0603S9N1□T
10	$\pm 3, \pm 5\%$	5	100	3.2	4.1	0.8	0.53	200	MLG0603S10N□T
11	$\pm 3, \pm 5\%$	6	100	3.0	3.7	0.8	0.53	200	MLG0603S11N□T
12	$\pm 3, \pm 5\%$	6	100	2.8	3.6	0.9	0.63	180	MLG0603S12N□T
13	$\pm 3, \pm 5\%$	6	100	2.7	3.4	0.9	0.60	180	MLG0603S13N□T
15	$\pm 3, \pm 5\%$	6	100	2.5	3.3	1.1	0.69	180	MLG0603S15N□T
16	$\pm 3, \pm 5\%$	6	100	2.3	3.0	1.1	0.70	180	MLG0603S16N□T
18	$\pm 3, \pm 5\%$	6	100	2.2	2.8	1.2	0.78	150	MLG0603S18N□T
20	$\pm 3, \pm 5\%$	6	100	2.1	2.6	1.2	0.75	150	MLG0603S20N□T
22	$\pm 3, \pm 5\%$	6	100	2.0	2.5	1.2	0.88	150	MLG0603S22N□T
24	$\pm 3, \pm 5\%$	6	100	1.9	2.3	1.3	0.90	150	MLG0603S24N□T
27	$\pm 3, \pm 5\%$	6	100	1.8	2.2	1.5	1.00	100	MLG0603S27N□T
30	$\pm 3, \pm 5\%$	6	100	1.6	2.0	1.6	0.95	100	MLG0603S30N□T
33	$\pm 3, \pm 5\%$	6	100	1.6	2.0	1.8	1.20	100	MLG0603S33N□T
36	$\pm 3, \pm 5\%$	6	100	1.5	1.8	2.0	1.68	50	MLG0603S36N□T
39	$\pm 3, \pm 5\%$	6	100	1.4	1.6	2.0	1.40	50	MLG0603S39N□T
43	$\pm 3, \pm 5\%$	6	100	1.3	1.6	2.2	1.91	50	MLG0603S43N□T
47	$\pm 3, \pm 5\%$	6	100	1.3	1.5	2.2	1.48	50	MLG0603S47N□T
51	$\pm 3, \pm 5\%$	5	100	1.2	1.5	2.8	1.98	50	MLG0603S51N□T
56	$\pm 3, \pm 5\%$	5	100	1.2	1.4	3.2	2.11	50	MLG0603S56N□T
62	$\pm 3, \pm 5\%$	5	100	1.1	1.3	3.3	2.22	50	MLG0603S62N□T
68	$\pm 3, \pm 5\%$	5	100	1.05	1.2	3.5	2.40	50	MLG0603S68N□T
75	$\pm 3, \pm 5\%$	5	100	0.95	1.2	3.8	2.67	50	MLG0603S75N□T
82	$\pm 3, \pm 5\%$	5	100	0.90	1.1	4.0	2.80	50	MLG0603S82N□T
91	$\pm 3, \pm 5\%$	5	100	0.77	0.9	4.3	2.97	50	MLG0603S91N□T
100	$\pm 3, \pm 5\%$	5	100	0.77	0.9	4.5	3.13	50	MLG0603SR10□T

\* □: Please specify inductance tolerance, B ( $\pm 0.1\text{nH}$ ), C ( $\pm 0.2\text{nH}$ ), S ( $\pm 0.3\text{nH}$ ), H ( $\pm 3\%$ ) or J ( $\pm 5\%$ ).

Please contact us for information on inductance tolerance, G ( $\pm 2\%$ ).

• Test equipment

Inductance Q : HP4291A+16197A, or equivalent

SRF: HP8720C, or equivalent

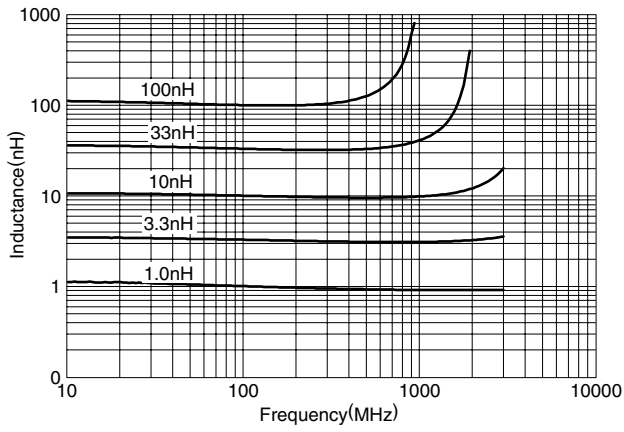
Rdc: YOKOGAWA TYPE7561, or equivalent

• All specifications are subject to change without notice.

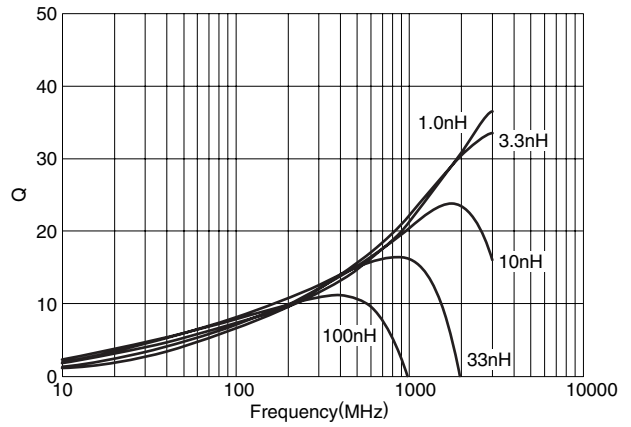
**L, Q vs. FREQUENCY CHARACTERISTICS**

Part No.	Inductance(nH)typ.					Q typ.				
	500MHz	800MHz	1.8GHz	2.0GHz	2.4GHz	500MHz	800MHz	1.8GHz	2.0GHz	2.4GHz
MLG0603S0N3	0.3	0.3	0.3	0.3	0.3	14min.	18min.	29min.	32min.	35min.
MLG0603S0N4	0.4	0.4	0.4	0.4	0.4	14min.	18min.	29min.	32min.	35min.
MLG0603S0N5	0.5	0.5	0.5	0.5	0.5	14	18	29	32	35
MLG0603S0N6	0.6	0.6	0.5	0.5	0.5	16	20	33	34	39
MLG0603S0N7	0.7	0.6	0.6	0.6	0.6	16	21	33	35	39
MLG0603S0N8	0.7	0.7	0.7	0.7	0.7	15	20	32	34	38
MLG0603S0N9	0.8	0.8	0.8	0.8	0.8	15	19	30	32	35
MLG0603S1N0	0.9	0.9	0.9	0.9	0.9	14	18	29	30	34
MLG0603S1N1	1.0	1.0	1.0	1.0	1.0	14	19	29	31	34
MLG0603S1N2	1.1	1.1	1.1	1.1	1.1	14	18	29	30	34
MLG0603S1N3	1.2	1.2	1.2	1.2	1.2	14	18	29	30	33
MLG0603S1N5	1.4	1.4	1.4	1.4	1.4	15	19	29	30	34
MLG0603S1N6	1.5	1.5	1.5	1.5	1.5	14	18	29	30	33
MLG0603S1N8	1.7	1.7	1.7	1.7	1.7	15	19	29	30	33
MLG0603S2N0	1.9	1.9	1.9	1.9	1.9	14	18	28	29	32
MLG0603S2N2	2.1	2.0	2.1	2.1	2.1	14	18	27	28	31
MLG0603S2N4	2.2	2.2	2.2	2.3	2.3	14	18	27	29	32
MLG0603S2N7	2.5	2.5	2.6	2.6	2.7	15	19	28	29	31
MLG0603S3N0	2.8	2.8	2.9	2.9	3.0	15	19	29	31	33
MLG0603S3N3	3.1	3.1	3.2	3.3	3.4	15	19	28	29	31
MLG0603S3N6	3.4	3.4	3.5	3.6	3.7	14	18	26	27	29
MLG0603S3N9	3.7	3.7	3.8	3.9	4.1	15	19	29	29	32
MLG0603S4N3	4.1	4.1	4.3	4.4	4.6	14	18	27	27	29
MLG0603S4N7	4.4	4.4	4.8	4.9	5.2	15	20	28	29	30
MLG0603S5N1	4.8	4.8	5.1	5.3	5.6	14	18	25	26	27
MLG0603S5N6	5.3	5.3	5.7	5.9	6.4	16	20	27	28	29
MLG0603S6N2	5.9	5.9	6.5	6.8	7.5	15	18	25	25	26
MLG0603S6N8	6.4	6.5	7.4	7.8	8.7	15	19	26	26	25
MLG0603S7N5	7.1	7.1	7.8	8.0	8.7	14	18	25	26	26
MLG0603S8N2	7.8	7.8	8.8	9.3	10.4	15	18	24	24	24
MLG0603S9N1	8.6	8.6	9.8	10.3	11.5	14	17	22	22	22
MLG0603S10N	10	10	12	12	15	15	18	23	22	21
MLG0603S11N	10	11	13	14	16	15	18	22	22	20
MLG0603S12N	11	12	14	15	19	16	19	24	23	20
MLG0603S13N	12	13	16	17	22	14	16	19	18	15
MLG0603S15N	14	15	20	23	33	15	19	20	18	14
MLG0603S16N	15	16	22	25	37	14	16	16	15	11
MLG0603S18N	17	18	28	35		14	17	15	13	
MLG0603S20N	19	20	32			13	16	14		
MLG0603S22N	21	23	40			15	17	13		
MLG0603S24N	23	24	45			13	15	13		
MLG0603S27N	27	29				15	17			
MLG0603S30N	29	32				13	15			
MLG0603S33N	33	36				14	16			
MLG0603S36N	36	40				14	15			
MLG0603S39N	40	47				13	14			
MLG0603S43N	44	53				14	14			
MLG0603S47N	49	60				13	13			
MLG0603S51N	52	64				11	11			
MLG0603S56N	59	77				12	11			
MLG0603S62N	66	88				11	10			
MLG0603S68N	74	104				13	11			
MLG0603S75N	82	119				10	8			
MLG0603S82N	96	161				12	8			
MLG0603S91N	109					9				
MLG0603SR10	129					11				

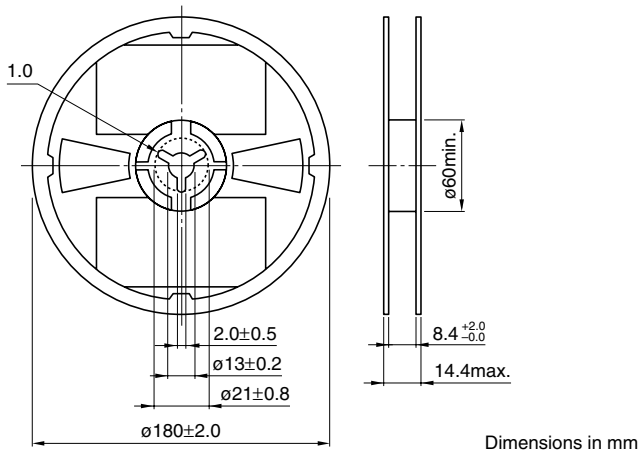
### TYPICAL ELECTRICAL CHARACTERISTICS INDUCTANCE vs. FREQUENCY CHARACTERISTICS



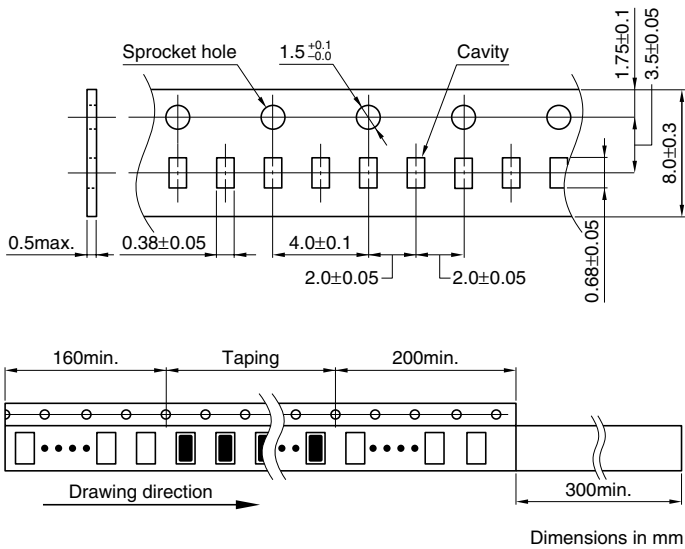
### Q vs. FREQUENCY CHARACTERISTICS



### PACKAGING STYLES REEL DIMENSIONS



### TAPE DIMENSIONS



• All specifications are subject to change without notice.

# SMD Inductors(Coils) For High Frequency(Multilayer)

Conformity to RoHS Directive

## MLG Series MLG1005S Type

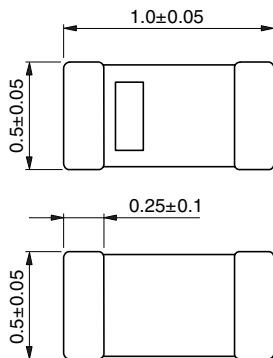
### FEATURES

- Inductance values are supported from 0.3 to 390nH.
- Advanced monolithic structure is formed using a multilayering and sintering process with ceramic and conductive materials for high-frequency.
- The products contain no lead and also support lead-free soldering.
- It is a product conforming to RoHS directive.

### APPLICATIONS

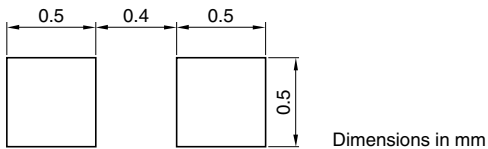
For high-frequency applications including mobile phones, high frequency modules (PA, VCO, FEM etc.), Bluetooth, W-LAN, UWB and tuners.

### SHAPES AND DIMENSIONS



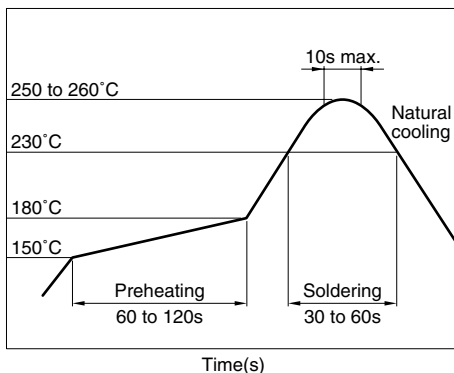
Weight: 1mg

### RECOMMENDED PC BOARD PATTERN



### RECOMMENDED SOLDERING CONDITION

#### REFLOW SOLDERING



- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

- Please contact our Sales office when your application is considered the following:  
The device's failure or malfunction may directly endanger human life (e.g. application for automobile/aircraft/medical/nuclear power devices, etc.)

- All specifications are subject to change without notice.

### PRODUCT IDENTIFICATION

MLG	1005	S	2N2	S	T
(1)	(2)	(3)	(4)	(5)	(6)

(1) Series name

(2) Dimensions

1005	1.0×0.5mm (L×W)
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(3) Material code

(4) Inductance value

2N2	2.2nH
12N	12nH
R10	100nH

(5) Inductance tolerance

B	±0.1nH
C	±0.2nH
S	±0.3nH
H	±3%
J	±5%

(6) Packaging style

T	Taping (reel)
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### SPECIFICATIONS

Operating temperature range	-55 to +125°C
Storage temperature range	-55 to +125°C

### PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	10000 pieces/reel

### HANDLING AND PRECAUTIONS

- Before soldering, be sure to preheat components.  
The preheating temperature should be set so that the temperature difference between the solder temperature and product temperature does not exceed 150°C.
- After mounting components onto the printed circuit board, do not apply stress through board bending or mishandling.
- When hand soldering, apply the soldering iron to the printed circuit board only. Temperature of the iron tip should not exceed 350°C. Soldering time should not exceed 3 seconds.

## ELECTRICAL CHARACTERISTICS

Inductance (nH)	Inductance tolerance	Q min.	Test frequency L, Q (MHz)	Self-resonant frequency (GHz)		DC resistance ( $\Omega$ )		Rated current (mA)max.	Part No.*
				min.	typ.	max.	typ.		
0.3	$\pm 0.1\text{nH}, \pm 0.2\text{nH}$	—	100	10.0	20up	0.10	0.01	1000	MLG1005S0N3□T
0.4	$\pm 0.1\text{nH}, \pm 0.2\text{nH}$	—	100	10.0	20up	0.10	0.01	1000	MLG1005S0N4□T
0.5	$\pm 0.1\text{nH}, \pm 0.2\text{nH}$	—	100	10.0	20up	0.10	0.01	1000	MLG1005S0N5□T
0.6	$\pm 0.1\text{nH}, \pm 0.2\text{nH}$	—	100	10.0	20up	0.10	0.01	1000	MLG1005S0N6□T
0.7	$\pm 0.1\text{nH}, \pm 0.2\text{nH}$	—	100	10.0	18.7	0.10	0.02	1000	MLG1005S0N7□T
0.8	$\pm 0.1\text{nH}, \pm 0.2\text{nH}$	—	100	10.0	16.4	0.10	0.02	1000	MLG1005S0N8□T
0.9	$\pm 0.1\text{nH}, \pm 0.2\text{nH}$	—	100	10.0	17.7	0.10	0.04	1000	MLG1005S0N9□T
1.0	$\pm 0.1\text{nH}, \pm 0.2, 0.3\text{nH}$	7	100	10.0	13.8	0.10	0.04	1000	MLG1005S1N0□T
1.1	$\pm 0.1\text{nH}, \pm 0.2, 0.3\text{nH}$	7	100	10.0	19.3	0.10	0.03	1000	MLG1005S1N1□T
1.2	$\pm 0.1\text{nH}, \pm 0.2, 0.3\text{nH}$	7	100	10.0	11.6	0.10	0.04	1000	MLG1005S1N2□T
1.3	$\pm 0.1\text{nH}, \pm 0.2, 0.3\text{nH}$	7	100	8.00	11.7	0.10	0.04	1000	MLG1005S1N3□T
1.5	$\pm 0.1\text{nH}, \pm 0.2, 0.3\text{nH}$	7	100	8.00	9.6	0.10	0.06	1000	MLG1005S1N5□T
1.6	$\pm 0.1\text{nH}, \pm 0.2, 0.3\text{nH}$	7	100	7.50	9.4	0.12	0.05	1000	MLG1005S1N6□T
1.8	$\pm 0.1\text{nH}, \pm 0.2, 0.3\text{nH}$	7	100	8.00	10.3	0.15	0.06	900	MLG1005S1N8□T
2.0	$\pm 0.1\text{nH}, \pm 0.2, 0.3\text{nH}$	7	100	7.50	9.3	0.15	0.07	900	MLG1005S2N0□T
2.2	$\pm 0.1\text{nH}, \pm 0.2, 0.3\text{nH}$	7	100	7.00	8.6	0.15	0.08	900	MLG1005S2N2□T
2.4	$\pm 0.1\text{nH}, \pm 0.2, 0.3\text{nH}$	7	100	7.00	8.2	0.15	0.08	800	MLG1005S2N4□T
2.7	$\pm 0.1\text{nH}, \pm 0.2, 0.3\text{nH}$	7	100	6.00	7.3	0.15	0.08	800	MLG1005S2N7□T
3.0	$\pm 0.1\text{nH}, \pm 0.2, 0.3\text{nH}$	7	100	5.50	6.8	0.20	0.09	800	MLG1005S3N0□T
3.3	$\pm 0.1\text{nH}, \pm 0.2, 0.3\text{nH}$	8	100	5.00	6.1	0.20	0.09	800	MLG1005S3N3□T
3.6	$\pm 0.1\text{nH}, \pm 0.2, 0.3\text{nH}$	8	100	5.00	6.7	0.20	0.09	700	MLG1005S3N6□T
3.9	$\pm 0.1\text{nH}, \pm 0.2, 0.3\text{nH}$	8	100	5.00	6.5	0.20	0.11	700	MLG1005S3N9□T
4.3	$\pm 0.2\text{nH}, \pm 0.3\text{nH}$	8	100	4.50	6.0	0.20	0.11	700	MLG1005S4N3□T
4.7	$\pm 0.2\text{nH}, \pm 0.3\text{nH}$	8	100	4.50	5.4	0.25	0.12	700	MLG1005S4N7□T
5.1	$\pm 0.2\text{nH}, \pm 0.3\text{nH}$	8	100	4.00	5.0	0.25	0.13	600	MLG1005S5N1□T
5.6	$\pm 0.2\text{nH}, \pm 0.3\text{nH}$	8	100	4.00	5.3	0.25	0.14	600	MLG1005S5N6□T
6.2	$\pm 3\%, \pm 0.3\text{nH}$	8	100	4.00	4.7	0.25	0.16	600	MLG1005S6N2□T
6.8	$\pm 3\%, \pm 5\%$	8	100	3.50	4.4	0.25	0.15	600	MLG1005S6N8□T
7.5	$\pm 3\%, \pm 5\%$	8	100	3.00	4.1	0.25	0.15	500	MLG1005S7N5□T
8.2	$\pm 3\%, \pm 5\%$	8	100	3.00	4.0	0.30	0.19	500	MLG1005S8N2□T
9.1	$\pm 3\%, \pm 5\%$	8	100	3.00	3.8	0.30	0.20	500	MLG1005S9N1□T
10	$\pm 3\%, \pm 5\%$	8	100	2.50	3.4	0.35	0.22	500	MLG1005S10N□T
11	$\pm 3\%, \pm 5\%$	8	100	2.50	3.5	0.40	0.28	400	MLG1005S11N□T
12	$\pm 3\%, \pm 5\%$	8	100	2.50	3.0	0.40	0.25	400	MLG1005S12N□T
13	$\pm 3\%, \pm 5\%$	8	100	2.40	2.9	0.50	0.26	400	MLG1005S13N□T
15	$\pm 3\%, \pm 5\%$	8	100	2.20	2.8	0.55	0.35	400	MLG1005S15N□T
16	$\pm 3\%, \pm 5\%$	8	100	2.10	2.7	0.55	0.32	400	MLG1005S16N□T
18	$\pm 3\%, \pm 5\%$	8	100	2.00	2.5	0.60	0.40	350	MLG1005S18N□T
20	$\pm 3\%, \pm 5\%$	8	100	1.90	2.4	0.60	0.38	350	MLG1005S20N□T
22	$\pm 3\%, \pm 5\%$	8	100	1.70	2.2	0.70	0.46	350	MLG1005S22N□T
24	$\pm 3\%, \pm 5\%$	8	100	1.70	2.1	0.70	0.43	350	MLG1005S24N□T
27	$\pm 3\%, \pm 5\%$	8	100	1.60	2.0	0.80	0.53	300	MLG1005S27N□T
30	$\pm 3\%, \pm 5\%$	8	100	1.50	1.9	0.80	0.50	300	MLG1005S30N□T
33	$\pm 3\%, \pm 5\%$	8	100	1.40	1.8	0.90	0.59	300	MLG1005S33N□T
36	$\pm 3\%, \pm 5\%$	8	100	1.30	1.7	1.00	0.62	250	MLG1005S36N□T
39	$\pm 3\%, \pm 5\%$	8	100	1.20	1.6	1.00	0.65	250	MLG1005S39N□T
43	$\pm 3\%, \pm 5\%$	8	100	1.20	1.6	1.10	0.67	250	MLG1005S43N□T
47	$\pm 3\%, \pm 5\%$	8	100	1.10	1.4	1.20	0.75	250	MLG1005S47N□T
51	$\pm 3\%, \pm 5\%$	8	100	1.10	1.5	1.20	0.72	250	MLG1005S51N□T
56	$\pm 3\%, \pm 5\%$	8	100	1.00	1.3	1.30	0.83	200	MLG1005S56N□T
62	$\pm 3\%, \pm 5\%$	8	100	1.00	1.3	1.40	0.85	200	MLG1005S62N□T
68	$\pm 3\%, \pm 5\%$	8	100	0.80	1.1	1.50	0.87	200	MLG1005S68N□T
75	$\pm 3\%, \pm 5\%$	8	100	0.75	1.1	1.50	0.93	200	MLG1005S75N□T
82	$\pm 3\%, \pm 5\%$	8	100	0.70	1.0	1.60	1.01	200	MLG1005S82N□T
91	$\pm 3\%, \pm 5\%$	8	100	0.70	0.9	1.80	1.14	200	MLG1005S91N□T

\* □: Please specify inductance tolerance, (B $\pm 0.1\text{nH}$ ), (C $\pm 0.2\text{nH}$ ), (S $\pm 0.3\text{nH}$ ), (H $\pm 3\%$ ) or (J $\pm 5\%$ ).

Please contact us for information on inductance tolerance, G( $\pm 2\%$ ).

• Test equipment

Inductance Q : HP4291A+16193A, or equivalent

SRF: HP8720C, or equivalent

Rdc: YOKOGAWA TYPE7561, or equivalent

**ELECTRICAL CHARACTERISTICS**

Inductance (nH)	Inductance tolerance	Q min.	Test frequency L, Q (MHz)	Self-resonant frequency (GHz)		DC resistance ( $\Omega$ )		Rated current (mA)max.	Part No.*
				min.	typ.	max.	typ.		
100	$\pm 3\%$ , $\pm 5\%$	8	100	0.70	0.9	2.00	1.37	200	MLG1005SR10□T
110	$\pm 3\%$ , $\pm 5\%$	8	100	0.70	0.9	2.20	1.48	150	MLG1005SR11□T
120	$\pm 3\%$ , $\pm 5\%$	8	100	0.60	0.8	2.20	1.48	150	MLG1005SR12□T
130	$\pm 3\%$ , $\pm 5\%$	8	100	0.60	0.8	2.50	1.68	150	MLG1005SR13□T
150	$\pm 3\%$ , $\pm 5\%$	8	100	0.55	0.7	3.50	2.44	150	MLG1005SR15□T
160	$\pm 3\%$ , $\pm 5\%$	8	100	0.50	0.6	3.80	2.74	150	MLG1005SR16□T
180	$\pm 3\%$ , $\pm 5\%$	8	100	0.50	0.6	3.80	2.88	150	MLG1005SR18□T
200	$\pm 3\%$ , $\pm 5\%$	8	100	0.42	0.5	4.20	3.15	100	MLG1005SR20□T
220	$\pm 3\%$ , $\pm 5\%$	8	100	0.45	0.5	4.20	3.02	100	MLG1005SR22□T
240	$\pm 3\%$ , $\pm 5\%$	8	100	0.40	0.5	4.80	3.42	100	MLG1005SR24□T
270	$\pm 3\%$ , $\pm 5\%$	8	100	0.40	0.5	4.80	3.54	100	MLG1005SR27□T
300	$\pm 3\%$ , $\pm 5\%$	6	50	0.35	0.4	6.50	4.82	50	MLG1005SR30□T
330	$\pm 3\%$ , $\pm 5\%$	6	50	0.35	0.4	7.00	5.21	50	MLG1005SR33□T
360	$\pm 3\%$ , $\pm 5\%$	6	50	0.30	0.4	7.50	5.39	50	MLG1005SR36□T
390	$\pm 3\%$ , $\pm 5\%$	6	50	0.30	0.4	8.00	5.97	50	MLG1005SR39□T

\* □: Please specify inductance tolerance, (B $\pm$ 0.1nH), (C $\pm$ 0.2nH), (S $\pm$ 0.3nH), (H $\pm$ 3%) or (J $\pm$ 5%).

Please contact us for information on inductance tolerance, G( $\pm$ 2%).

• Test equipment

Inductance Q : HP4291A+16193A, or equivalent

SRF: HP8720C, or equivalent

Rdc: YOKOGAWA TYPE7561, or equivalent

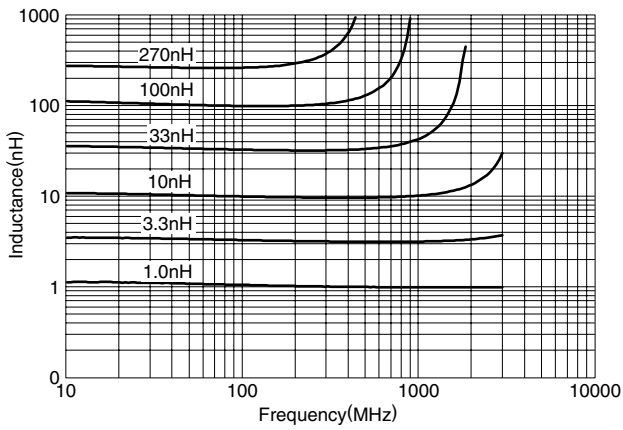
**L, Q vs. FREQUENCY CHARACTERISTICS**

Part No.	Inductance(nH)typ.					Q typ.				
	500MHz	800MHz	1.8GHz	2.0GHz	2.4GHz	500MHz	800MHz	1.8GHz	2.0GHz	2.4GHz
MLG1005S0N3	0.3	0.3	0.3	0.3	0.3	22min.	27min.	46min.	49min.	53min.
MLG1005S0N4	0.4	0.4	0.4	0.4	0.4	22min.	27min.	46min.	49min.	53min.
MLG1005S0N5	0.5	0.5	0.5	0.5	0.5	22min.	27min.	46min.	49min.	53min.
MLG1005S0N6	0.6	0.6	0.6	0.6	0.6	22	27	46	49	53
MLG1005S0N7	0.7	0.7	0.7	0.7	0.7	22	28	45	49	54
MLG1005S0N8	0.8	0.8	0.8	0.8	0.8	26	34	57	60	66
MLG1005S0N9	0.9	0.8	0.8	0.8	0.8	21	27	44	47	53
MLG1005S1N0	0.9	0.9	0.9	0.9	0.9	22	29	48	50	56
MLG1005S1N1	1.0	1.0	1.0	1.0	1.0	23	29	47	50	57
MLG1005S1N2	1.1	1.1	1.1	1.1	1.1	23	29	48	50	56
MLG1005S1N3	1.2	1.2	1.2	1.2	1.2	22	27	44	47	53
MLG1005S1N5	1.4	1.4	1.4	1.5	1.5	23	29	47	50	56
MLG1005S1N6	1.5	1.5	1.5	1.6	1.6	23	29	46	49	54
MLG1005S1N8	1.7	1.7	1.7	1.7	1.7	20	26	41	43	49
MLG1005S2N0	1.9	1.9	1.9	1.9	1.9	21	25	41	43	48
MLG1005S2N2	2.1	2.1	2.1	2.1	2.2	22	27	44	47	52
MLG1005S2N4	2.3	2.3	2.3	2.3	2.4	21	26	42	44	49
MLG1005S2N7	2.6	2.6	2.6	2.7	2.7	22	27	43	45	50
MLG1005S3N0	2.9	2.9	3.0	3.0	3.1	24	29	47	49	54
MLG1005S3N3	3.2	3.2	3.3	3.4	3.5	24	30	46	48	53
MLG1005S3N6	3.4	3.4	3.6	3.6	3.8	21	26	40	42	46
MLG1005S3N9	3.7	3.7	3.9	3.9	4.1	22	28	43	45	50
MLG1005S4N3	4.1	4.1	4.3	4.4	4.6	24	30	47	49	53
MLG1005S4N7	4.5	4.5	4.8	4.9	5.2	23	30	45	47	50
MLG1005S5N1	4.9	4.9	5.4	5.6	6.1	23	29	42	43	44
MLG1005S5N6	5.4	5.4	5.8	5.9	6.3	22	28	42	43	45
MLG1005S6N2	6.0	6.0	6.8	7.1	7.8	24	29	42	43	43
MLG1005S6N8	6.5	6.6	7.4	7.8	8.6	23	28	40	41	41
MLG1005S7N5	7.2	7.4	8.6	9.2	10.5	24	30	41	41	39
MLG1005S8N2	7.9	8.0	9.3	9.9	11.3	23	28	38	38	36
MLG1005S9N1	8.8	9.0	10.8	11.6	13.7	24	30	40	39	36
MLG1005S10N	9.7	9.9	12.4	13.5	16.7	24	30	37	36	31
MLG1005S11N	10.6	10.9	13.8	15.1	19.0	23	28	34	33	28
MLG1005S12N	11.7	12.1	16.2	18.3		23	29	33	31	
MLG1005S13N	12.6	13.0	18.3	21.3		20	24	25	22	
MLG1005S15N	14.7	15.3	22.0	26.0		23	28	29	26	
MLG1005S16N	15.6	16.2	24.1	29.0		22	26	26	22	
MLG1005S18N	17.7	18.6	29.0			23	28	26		
MLG1005S20N	19.7	20.8	36.8			21	25	21		
MLG1005S22N	21.8	23.3				22	27			
MLG1005S24N	23.8	25.5				22	26			
MLG1005S27N	27.0	29.6				20	23			
MLG1005S30N	30.1	33.5				19	21			
MLG1005S33N	33.5	37.8				20	23			
MLG1005S36N	36.7	41.5				21	23			
MLG1005S39N	40.3	46.9				20	21			
MLG1005S43N	44.3	51.6				20	21			
MLG1005S47N	50.2	63.2				19	20			
MLG1005S51N	53.7	65.6				19	19			
MLG1005S56N	60.9	80.2				19	18			
MLG1005S62N	67.5	89.8				18	16			
MLG1005S68N	75.8	107.5				17	15			
MLG1005S75N	86.5	135.2				17	13			
MLG1005S82N	96.9					16				
MLG1005S91N	111.0					15				
MLG1005SR10	128.9					14				
MLG1005SR11	140.8					15				
MLG1005SR12	175.2					12				
MLG1005SR13	187.8					13				
MLG1005SR15	284.7					11				
MLG1005SR16										
MLG1005SR18										
MLG1005SR20										
MLG1005SR22										
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MLG1005SR33										
MLG1005SR36										
MLG1005SR39										

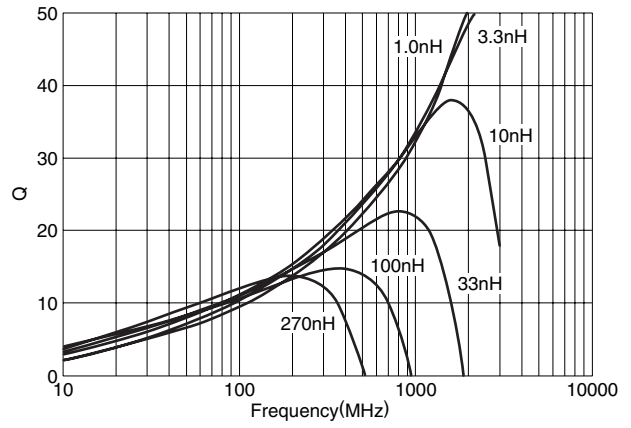
• All specifications are subject to change without notice.



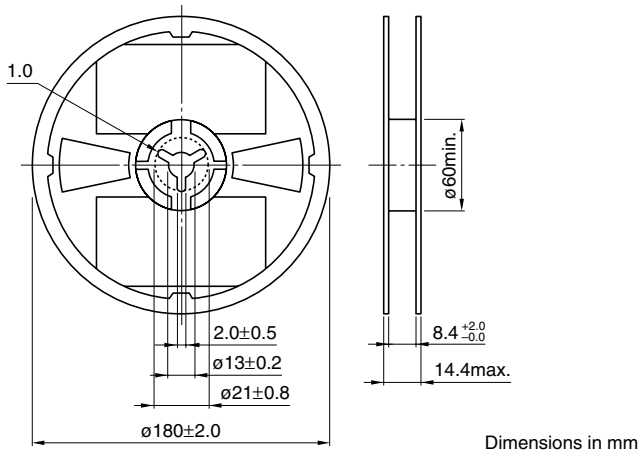
### TYPICAL ELECTRICAL CHARACTERISTICS INDUCTANCE vs. FREQUENCY CHARACTERISTICS



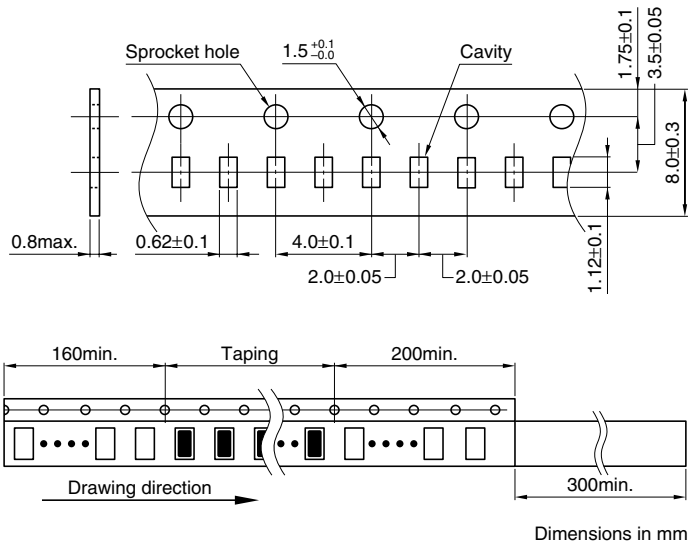
### Q vs. FREQUENCY CHARACTERISTICS



### PACKAGING STYLES REEL DIMENSIONS



### TAPE DIMENSIONS



• All specifications are subject to change without notice.

# SMD Inductors(Coils) For High Frequency(Multilayer)

Conformity to RoHS Directive

## MLG Series MLG1608

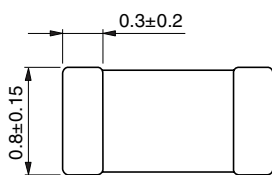
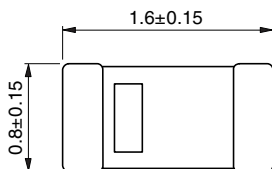
### FEATURES

- Inductance values are supported from 1 to 1000nH.
- Advanced monolithic structure is formed using a multilayering and sintering process with ceramic and conductive materials for high-frequency.
- The products contain no lead and also support lead-free soldering.
- It is a product conforming to RoHS directive.

### APPLICATIONS

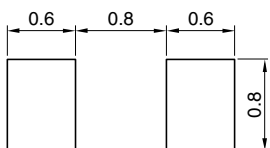
For high-frequency applications including mobile phones, high frequency modules (PA, VCO, FEM etc.), Bluetooth, W-LAN, UWB and tuners.

### SHAPES AND DIMENSIONS



Weight: 4mg

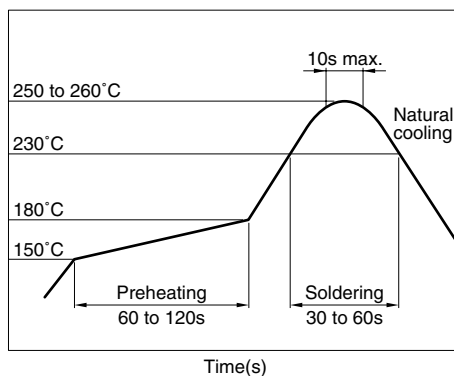
### RECOMMENDED PC BOARD PATTERN



Dimensions in mm



### RECOMMENDED SOLDERING CONDITION REFLOW SOLDERING



- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

- Please contact our Sales office when your application is considered the following:  
The device's failure or malfunction may directly endanger human life (e.g. application for automobile/aircraft/medical/nuclear power devices, etc.)

- All specifications are subject to change without notice.

### PRODUCT IDENTIFICATION

MLG	1608	B	2N2	S	T
(1)	(2)	(3)	(4)	(5)	(6)

(1) Series name

(2) Dimensions

1608 1.6×0.8mm (L×W)

(3) Material code

(4) Inductance value

2N2	2.2nH
12N	12nH
R10	100nH
1R0	1000nH

(5) Inductance tolerance

S	±0.3nH
D	±0.5nH
J	±5%

(6) Packaging style

T Taping (reel)

### SPECIFICATIONS

Operating temperature range	-55 to +125°C
Storage temperature range	-55 to +125°C

### PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	4000 pieces/reel

### HANDLING AND PRECAUTIONS

- Before soldering, be sure to preheat components.  
The preheating temperature should be set so that the temperature difference between the solder temperature and product temperature does not exceed 150°C.
- After mounting components onto the printed circuit board, do not apply stress through board bending or mishandling.
- When hand soldering, apply the soldering iron to the printed circuit board only. Temperature of the iron tip should not exceed 300°C. Soldering time should not exceed 3 seconds.

**ELECTRICAL CHARACTERISTICS**

Inductance (nH)	Inductance tolerance	Q min.	Test frequency L, Q (MHz)	Self-resonant frequency (GHz)		DC resistance ( $\Omega$ )		Rated current (mA)max.	Part No.
				min.	typ.	max.	typ.		
1	$\pm 0.3$ nH	8	100	10.0	20up	0.10	0.03	600	MLG1608B1N0ST
1.2	$\pm 0.3$ nH	8	100	10.0	20up	0.10	0.04	600	MLG1608B1N2ST
1.5	$\pm 0.3$ nH	8	100	10.0	19.6	0.10	0.03	600	MLG1608B1N5ST
1.8	$\pm 0.3$ nH	8	100	10.0	16.6	0.10	0.04	600	MLG1608B1N8ST
2.2	$\pm 0.3$ nH	10	100	8.0	10.8	0.10	0.05	600	MLG1608B2N2ST
2.7	$\pm 0.3$ nH	10	100	7.0	8.8	0.12	0.06	600	MLG1608B2N7ST
3.3	$\pm 0.3$ nH	10	100	6.5	8.8	0.12	0.06	600	MLG1608B3N3ST
3.9	$\pm 0.3$ nH	10	100	6.0	7.9	0.14	0.06	600	MLG1608B3N9ST
4.7	$\pm 0.3$ nH	10	100	5.0	6.8	0.15	0.08	600	MLG1608B4N7ST
5.6	$\pm 0.5$ nH	10	100	5.0	6.8	0.16	0.08	600	MLG1608B5N6DT
6.8	$\pm 0.5$ nH	10	100	4.5	5.7	0.18	0.10	600	MLG1608B6N8DT
8.2	$\pm 0.5$ nH	10	100	4.5	5.6	0.20	0.10	600	MLG1608B8N2DT
10	$\pm 5\%$	12	100	3.5	4.5	0.20	0.11	600	MLG1608B10NJT
12	$\pm 5\%$	12	100	3.0	3.8	0.25	0.13	600	MLG1608B12NJT
15	$\pm 5\%$	12	100	2.8	3.6	0.28	0.14	600	MLG1608B15NJT
18	$\pm 5\%$	12	100	2.6	3.3	0.32	0.16	600	MLG1608B18NJT
22	$\pm 5\%$	12	100	2.3	3.0	0.35	0.19	500	MLG1608B22NJT
27	$\pm 5\%$	12	100	2.0	2.7	0.40	0.21	500	MLG1608B27NJT
33	$\pm 5\%$	12	100	1.8	2.3	0.50	0.25	500	MLG1608B33NJT
39	$\pm 5\%$	12	100	1.6	2.0	0.55	0.26	400	MLG1608B39NJT
47	$\pm 5\%$	14	100	1.4	1.8	0.60	0.35	400	MLG1608B47NJT
56	$\pm 5\%$	14	100	1.2	1.8	0.70	0.41	400	MLG1608B56NJT
68	$\pm 5\%$	14	100	1.1	1.6	0.75	0.43	300	MLG1608B68NJT
82	$\pm 5\%$	14	100	1.0	1.4	0.80	0.50	300	MLG1608B82NJT
100	$\pm 5\%$	14	100	0.80	1.2	1.00	0.64	300	MLG1608BR10JT
120	$\pm 5\%$	14	100	0.65	0.8	1.20	0.89	300	MLG1608SR12JT
150	$\pm 5\%$	14	100	0.55	0.7	1.30	1.03	250	MLG1608SR15JT
180	$\pm 5\%$	14	100	0.50	0.6	1.40	1.08	250	MLG1608SR18JT
220	$\pm 5\%$	14	100	0.45	0.6	1.70	1.29	200	MLG1608SR22JT
270	$\pm 5\%$	14	100	0.35	0.5	2.00	1.59	200	MLG1608SR27JT
330	$\pm 5\%$	10	50	0.35	0.47	2.80	1.90	100	MLG1608SR33JT
390	$\pm 5\%$	10	50	0.30	0.43	3.00	2.06	100	MLG1608SR39JT
470	$\pm 5\%$	10	50	0.25	0.39	3.50	2.47	100	MLG1608SR47JT
560	$\pm 5\%$	10	50	0.25	0.36	4.50	3.20	70	MLG1608SR56JT
680	$\pm 5\%$	10	50	0.20	0.31	5.50	3.88	70	MLG1608SR68JT
820	$\pm 5\%$	10	50	0.15	0.22	5.50	3.76	70	MLG1608SR82JT
1000	$\pm 5\%$	10	50	0.13	0.19	5.50	4.27	70	MLG1608SR10JT

• Because it provides for a product of smaller inductance tolerance, please refer.

• Test equipment

Inductance Q : HP4291A+16193A, or equivalent

SRF: HP8720C, or equivalent

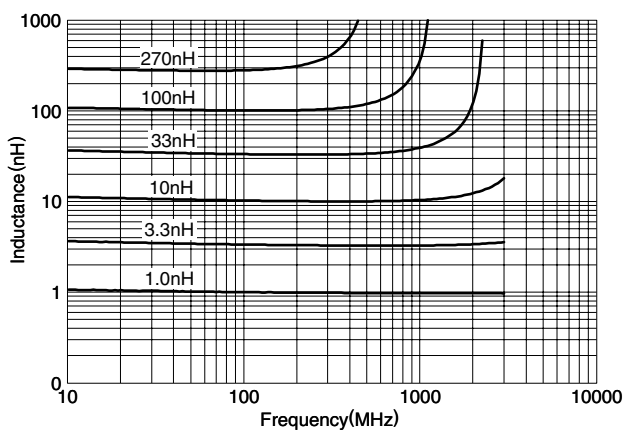
Rdc: YOKOGAWA TYPE7561, or equivalent

## L, Q vs. FREQUENCY CHARACTERISTICS

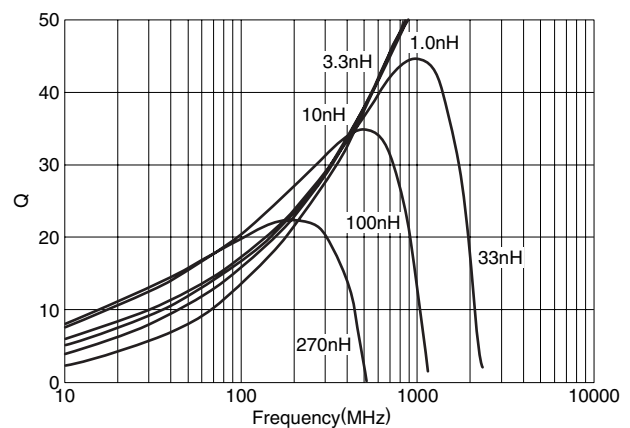
Part No.	Inductance(nH)typ.					Q typ.				
	500MHz	800MHz	1.8GHz	2.0GHz	2.4GHz	500MHz	800MHz	1.8GHz	2.0GHz	2.4GHz
MLG1608B1N0ST	1.0	1.0	1.0	1.0	1.0	39	48	77	82	95
MLG1608B1N2ST	1.2	1.1	1.2	1.2	1.2	28	35	57	60	68
MLG1608B1N5ST	1.5	1.5	1.5	1.5	1.5	37	48	78	81	93
MLG1608B1N8ST	1.8	1.8	1.8	1.8	1.8	38	48	77	81	95
MLG1608B2N2ST	2.2	2.1	2.2	2.2	2.2	44	54	88	91	107
MLG1608B2N7ST	2.6	2.6	2.7	2.7	2.8	40	51	79	81	94
MLG1608B3N3ST	3.2	3.2	3.3	3.3	3.4	38	48	76	79	91
MLG1608B3N9ST	3.8	3.8	4.0	4.0	4.1	40	50	79	81	93
MLG1608B4N7ST	4.6	4.6	4.9	5.0	5.2	41	51	76	79	88
MLG1608B5N6DT	5.4	5.5	5.8	5.9	6.2	37	46	69	71	79
MLG1608B6N8DT	6.6	6.7	7.3	7.5	8.0	38	47	67	68	74
MLG1608B8N2DT	8.0	8.1	8.9	9.3	10	39	48	67	68	71
MLG1608B10NJT	9.8	10.0	11.5	12.1	13.6	38	47	63	63	61
MLG1608B12NJT	11.8	12.1	14.8	16.0	19.3	39	48	59	57	51
MLG1608B15NJT	14.8	15.4	20.6	23.4		38	46	49	46	
MLG1608B18NJT	17.8	18.5	25.5	29.3		36	44	47	42	
MLG1608B22NJT	21.9	22.9	33.6	40.2		36	44	43	38	
MLG1608B27NJT	27.1	28.8	50.6			37	43	34		
MLG1608B33NJT	33.4	36.0				37	43			
MLG1608B39NJT	40.2	45.0				36	40			
MLG1608B47NJT	49.1	56.0				38	41			
MLG1608B56NJT	59.6	71.1				37	38			
MLG1608B68NJT	74.0	92.8				34	33			
MLG1608B82NJT	91.1	120.6				33	31			
MLG1608BR10JT	118					35				
MLG1608SR12JT	188					23				
MLG1608SR15JT										
MLG1608SR18JT										
MLG1608SR22JT										
MLG1608SR27JT										
MLG1608SR33JT										
MLG1608SR39JT										
MLG1608SR47JT										
MLG1608SR56JT										
MLG1608SR68JT										
MLG1608SR82JT										
MLG1608S1R0JT										

## TYPICAL ELECTRICAL CHARACTERISTICS

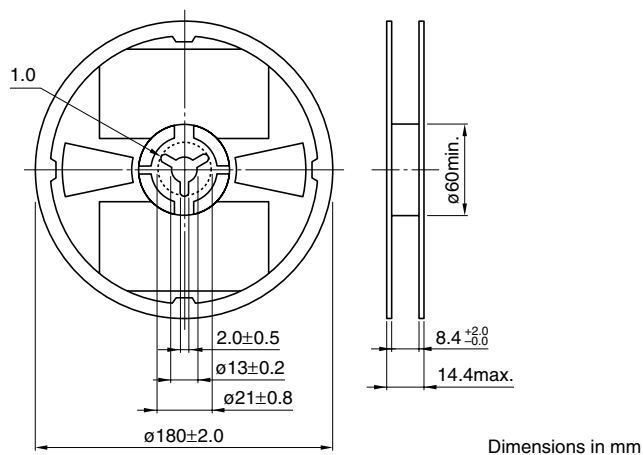
### INDUCTANCE vs. FREQUENCY CHARACTERISTICS



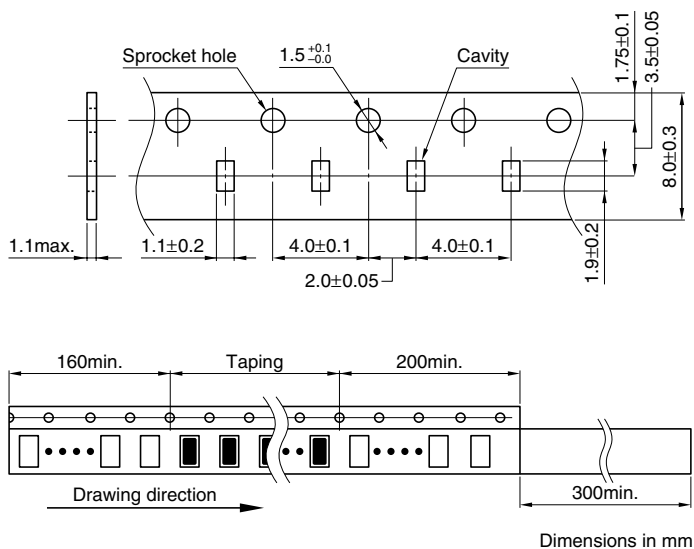
### Q vs. FREQUENCY CHARACTERISTICS



### PACKAGING STYLES REEL DIMENSIONS



### TAPE DIMENSIONS



• All specifications are subject to change without notice.