



Inductors for High Frequency Circuits

Multilayer Ceramic

MLG-P Series

MLG0402P_{Type}

MLG0402P

0402 [01005 inch]*

* Dimensions Code JIS[EIA]

REMINDERS FOR USING THESE PRODUCTS

Before using these products, be sure to request the delivery specifications.

SAFETY REMINDERS

Please pay sufficient attention to the warnings for safe designing when using these products.

REMINDERS

- The storage period is less than 12 months. Be sure to follow the storage conditions (Temperature: 5 to 40°C, Humidity: 10 to 75% RH or less).
If the storage period elapses, the soldering of the terminal electrodes may deteriorate.
- Do not use or store in locations where there are conditions such as gas corrosion (salt, acid, alkali, etc.).
- Before soldering, be sure to preheat components.
The preheating temperature should be set so that the temperature difference between the solder temperature and chip temperature does not exceed 150°C.
- Soldering corrections after mounting should be within the range of the conditions determined in the specifications.
If overheated, a short circuit, performance deterioration, or lifespan shortening may occur.
- When embedding a printed circuit board where a chip is mounted to a set, be sure that residual stress is not given to the chip due to the overall distortion of the printed circuit board and partial distortion such as at screw tightening portions.
- Self heating (temperature increase) occurs when the power is turned ON, so the tolerance should be sufficient for the set thermal design.
- Carefully lay out the coil for the circuit board design of the non-magnetic shield type.
A malfunction may occur due to magnetic interference.
- Use a wrist band to discharge static electricity in your body through the grounding wire.
- Do not expose the products to magnets or magnetic fields.
- Do not use for a purpose outside of the contents regulated in the delivery specifications.
- The products listed on this catalog are intended for use in general electronic equipment (AV equipment, telecommunications equipment, home appliances, amusement equipment, computer equipment, personal equipment, office equipment, measurement equipment, industrial robots) under a normal operation and use condition.
The products are not designed or warranted to meet the requirements of the applications listed below, whose performance and/or quality require a more stringent level of safety or reliability, or whose failure, malfunction or trouble could cause serious damage to society, person or property.
If you intend to use the products in the applications listed below or if you have special requirements exceeding the range or conditions set forth in the each catalog, please contact us.

- (1) Aerospace/Aviation equipment
- (2) Transportation equipment (cars, electric trains, ships, etc.)
- (3) Medical equipment
- (4) Power-generation control equipment
- (5) Atomic energy-related equipment
- (6) Seabed equipment
- (7) Transportation control equipment

- (8) Public information-processing equipment
- (9) Military equipment
- (10) Electric heating apparatus, burning equipment
- (11) Disaster prevention/crime prevention equipment
- (12) Safety equipment
- (13) Other applications that are not considered general-purpose applications

When designing your equipment even for general-purpose applications, you are kindly requested to take into consideration securing protection circuit/device or providing backup circuits in your equipment.

Inductors for High Frequency Circuits

Multilayer Ceramic

Product compatible with RoHS directive
Halogen-free
Compatible with lead-free solders

Overview of MLG0402P Type

FEATURES

- High Q type inductor for high-frequency circuits.
- Inductance range: from 0.2 to 33nH.
- 0.1n step inductance lineup.
- Compared with existing products, the size was greatly reduced, making it optimal for fine-pitch circuits.
- Optimal configuration that greatly improves the Q to 800MHz or higher.
- Advanced monolithic structure is formed using a multilayering and sintering process with ceramic and conductive materials for High-frequency.

APPLICATION

Smart phones, tablet terminals, high frequency modules (PAs, VCOs, FEMs , etc.), Bluetooth, W-LAN, UWB, tuners and other high frequency circuits for the mobile communication industry

PART NUMBER CONSTRUCTION

MLG	0402		P	0N2		B		T		000
Series name	L×W×H Dimensions (mm)		Characteristics	Inductance (nH)		Inductance tolerance		Packaging style		Internal code
	0402	0.4×0.2×0.2		1N1	1.1	B	±0.1nH	T	Taping	
				11N	11	C	±0.2nH			
						S	±0.3nH			
						H	±3%			
					J	±5%				

OPERATING TEMPERATURE RANGE, PACKAGE QUANTITY, PRODUCT WEIGHT

Type	Temperature range		Package quantity (pieces/reel)	Individual weight (mg)
	Operating temperature (°C)	Storage temperature* (°C)		
MLG0402P	-55 to +125	-55 to +125	20000	0.07

* The Storage temperature range is for after the circuit board is mounted.

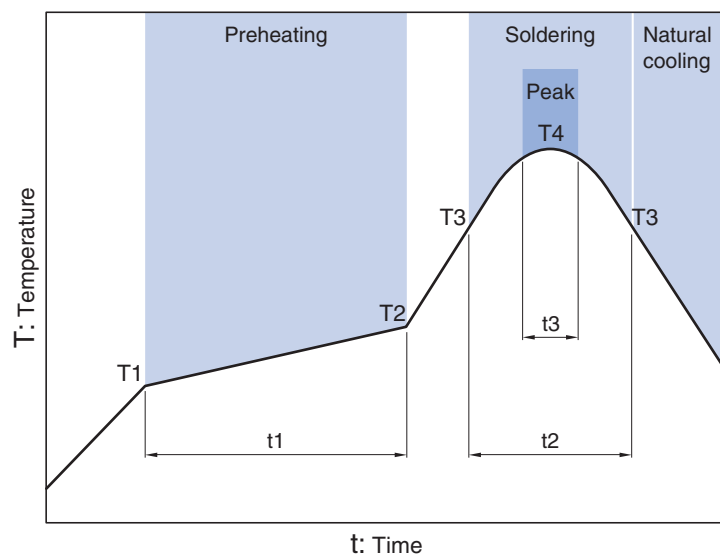
○ RoHS Directive Compliant Product: See the following for more details.<https://product.tdk.com/info/en/environment/rohs/index.html>

○ Halogen-free: Indicates that Cl content is less than 900ppm, Br content is less than 900ppm, and that the total Cl and Br content is less than 1500ppm.

 Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use.
Please note that the contents may change without any prior notice due to reasons such as upgrading.

MLG0402P Type

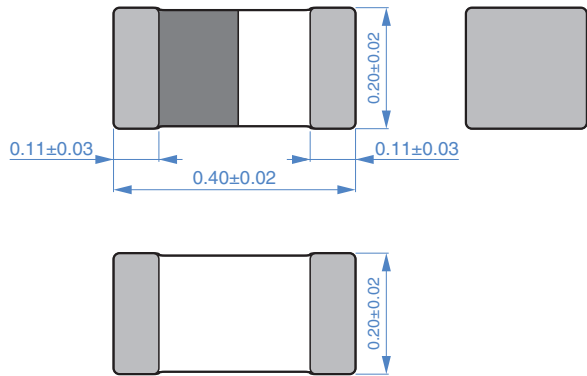
RECOMMENDED REFLOW PROFILE



Preheating			Soldering		Peak	
Temp.	Time		Temp.	Time	Temp.	Time
T1	T2	t1	T3	t2	T4	t3
150°C	180°C	60 to 120s	230°C	30 to 60s	250 to 260°C	10s max.

MLG0402P Type

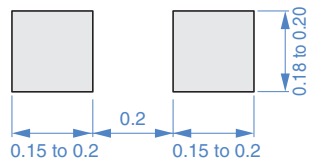
■ SHAPE & DIMENSIONS



Dimensions in mm



■ RECOMMENDED LAND PATTERN



Dimensions in mm

MLG0402P Type

ELECTRICAL CHARACTERISTICS

CHARACTERISTICS SPECIFICATION TABLE

L		Q	L, Q measuring frequency	Self-resonant frequency		DC resistance		Rated current	Part No.*
(nH)	Tolerance	min.	(MHz)	(GHz)min.	(GHz)typ.	(Ω)max.	(Ω)typ.	(mA)max.	
0.2	±0.1nH	—	500	10.0	20.0	0.1	0.03	350	MLG0402P0N2BT000
0.2	±0.2nH	—	500	10.0	20.0	0.1	0.03	350	MLG0402P0N2CT000
0.3	±0.1nH	—	500	10.0	20.0	0.1	0.03	350	MLG0402P0N3BT000
0.3	±0.2nH	—	500	10.0	20.0	0.1	0.03	350	MLG0402P0N3CT000
0.4	±0.1nH	—	500	10.0	20.0	0.2	0.07	350	MLG0402P0N4BT000
0.4	±0.2nH	—	500	10.0	20.0	0.2	0.07	350	MLG0402P0N4CT000
0.4	±0.3nH	—	500	10.0	20.0	0.2	0.07	350	MLG0402P0N4ST000
0.5	±0.1nH	—	500	10.0	20.0	0.2	0.08	350	MLG0402P0N5BT000
0.5	±0.2nH	—	500	10.0	20.0	0.2	0.08	350	MLG0402P0N5CT000
0.5	±0.3nH	—	500	10.0	20.0	0.2	0.08	350	MLG0402P0N5ST000
0.6	±0.1nH	—	500	10.0	20.0	0.2	0.11	350	MLG0402P0N6BT000
0.6	±0.2nH	—	500	10.0	20.0	0.2	0.11	350	MLG0402P0N6CT000
0.6	±0.3nH	—	500	10.0	20.0	0.2	0.11	350	MLG0402P0N6ST000
0.7	±0.1nH	—	500	10.0	20.0	0.3	0.13	320	MLG0402P0N7BT000
0.7	±0.2nH	—	500	10.0	20.0	0.3	0.13	320	MLG0402P0N7CT000
0.7	±0.3nH	—	500	10.0	20.0	0.3	0.13	320	MLG0402P0N7ST000
0.8	±0.1nH	—	500	10.0	18.3	0.4	0.11	320	MLG0402P0N8BT000
0.8	±0.2nH	—	500	10.0	18.3	0.4	0.11	320	MLG0402P0N8CT000
0.8	±0.3nH	—	500	10.0	18.3	0.4	0.11	320	MLG0402P0N8ST000
0.9	±0.1nH	—	500	10.0	17.3	0.4	0.15	320	MLG0402P0N9BT000
0.9	±0.2nH	—	500	10.0	17.3	0.4	0.15	320	MLG0402P0N9CT000
0.9	±0.3nH	—	500	10.0	17.3	0.4	0.15	320	MLG0402P0N9ST000
1.0	±0.1nH	8	500	10.0	16.5	0.4	0.20	250	MLG0402P1N0BT000
1.0	±0.2nH	8	500	10.0	16.5	0.4	0.20	250	MLG0402P1N0CT000
1.0	±0.3nH	8	500	10.0	16.5	0.4	0.20	250	MLG0402P1N0ST000
1.1	±0.1nH	8	500	10.0	15.0	0.5	0.22	250	MLG0402P1N1BT000
1.1	±0.2nH	8	500	10.0	15.0	0.5	0.22	250	MLG0402P1N1CT000
1.1	±0.3nH	8	500	10.0	15.0	0.5	0.22	250	MLG0402P1N1ST000
1.2	±0.1nH	8	500	10.0	14.8	0.5	0.25	250	MLG0402P1N2BT000
1.2	±0.2nH	8	500	10.0	14.8	0.5	0.25	250	MLG0402P1N2CT000
1.2	±0.3nH	8	500	10.0	14.8	0.5	0.25	250	MLG0402P1N2ST000
1.3	±0.1nH	8	500	10.0	15.9	0.6	0.28	250	MLG0402P1N3BT000
1.3	±0.2nH	8	500	10.0	15.9	0.6	0.28	250	MLG0402P1N3CT000
1.3	±0.3nH	8	500	10.0	15.9	0.6	0.28	250	MLG0402P1N3ST000
1.4	±0.1nH	7	500	10.0	14.0	0.6	0.30	250	MLG0402P1N4BT000
1.4	±0.2nH	7	500	10.0	14.0	0.6	0.30	250	MLG0402P1N4CT000
1.4	±0.3nH	7	500	10.0	14.0	0.6	0.30	250	MLG0402P1N4ST000
1.5	±0.1nH	8	500	10.0	14.0	0.6	0.37	220	MLG0402P1N5BT000
1.5	±0.2nH	8	500	10.0	14.0	0.6	0.37	220	MLG0402P1N5CT000
1.5	±0.3nH	8	500	10.0	14.0	0.6	0.37	220	MLG0402P1N5ST000
1.6	±0.1nH	9	500	9.0	12.9	0.6	0.25	220	MLG0402P1N6BT000
1.6	±0.2nH	9	500	9.0	12.9	0.6	0.25	220	MLG0402P1N6CT000
1.6	±0.3nH	9	500	9.0	12.9	0.6	0.25	220	MLG0402P1N6ST000
1.7	±0.1nH	9	500	9.0	12.4	0.6	0.25	200	MLG0402P1N7BT000
1.7	±0.2nH	9	500	9.0	12.4	0.6	0.25	200	MLG0402P1N7CT000
1.7	±0.3nH	9	500	9.0	12.4	0.6	0.25	200	MLG0402P1N7ST000

* Short bar residual inductance =0.11nH

○ Measurement equipment

Measurement item	Product No.	Manufacturer
L, Q	4291B+16196D	Keysight Technologies
Self-resonant frequency	8720C	Keysight Technologies
DC resistance	4338A	Keysight Technologies

* Equivalent measurement equipment may be used.

MLG0402P Type

ELECTRICAL CHARACTERISTICS

CHARACTERISTICS SPECIFICATION TABLE

L	Q	L, Q measuring frequency	Self-resonant frequency		DC resistance		Rated current	Part No.*	
(nH)	Tolerance	min.	(MHz)	(GHz)min.	(GHz)typ.	(Ω)max.	(Ω)typ.	(mA)max.	
1.8	±0.1nH	9	500	8.0	11.5	0.6	0.28	200	MLG0402P1N8BT000
1.8	±0.2nH	9	500	8.0	11.5	0.6	0.28	200	MLG0402P1N8CT000
1.8	±0.3nH	9	500	8.0	11.5	0.6	0.28	200	MLG0402P1N8ST000
1.9	±0.1nH	9	500	8.0	10.5	0.6	0.27	200	MLG0402P1N9BT000
1.9	±0.2nH	9	500	8.0	10.5	0.6	0.27	200	MLG0402P1N9CT000
1.9	±0.3nH	9	500	8.0	10.5	0.6	0.27	200	MLG0402P1N9ST000
2.0	±0.1nH	9	500	8.0	11.0	0.6	0.30	200	MLG0402P2N0BT000
2.0	±0.2nH	9	500	8.0	11.0	0.6	0.30	200	MLG0402P2N0CT000
2.0	±0.3nH	9	500	8.0	11.0	0.6	0.30	200	MLG0402P2N0ST000
2.1	±0.1nH	8	500	8.0	11.5	0.7	0.36	200	MLG0402P2N1BT000
2.1	±0.2nH	8	500	8.0	11.5	0.7	0.36	200	MLG0402P2N1CT000
2.1	±0.3nH	8	500	8.0	11.5	0.7	0.36	200	MLG0402P2N1ST000
2.2	±0.1nH	8	500	8.0	10.7	0.7	0.43	200	MLG0402P2N2BT000
2.2	±0.2nH	8	500	8.0	10.7	0.7	0.43	200	MLG0402P2N2CT000
2.2	±0.3nH	8	500	8.0	10.7	0.7	0.43	200	MLG0402P2N2ST000
2.3	±0.1nH	8	500	7.0	10.3	0.7	0.46	200	MLG0402P2N3BT000
2.3	±0.2nH	8	500	7.0	10.3	0.7	0.46	200	MLG0402P2N3CT000
2.3	±0.3nH	8	500	7.0	10.3	0.7	0.46	200	MLG0402P2N3ST000
2.4	±0.1nH	8	500	7.0	10.2	0.7	0.43	200	MLG0402P2N4BT000
2.4	±0.2nH	8	500	7.0	10.2	0.7	0.43	200	MLG0402P2N4CT000
2.4	±0.3nH	8	500	7.0	10.2	0.7	0.43	200	MLG0402P2N4ST000
2.5	±0.1nH	8	500	7.0	10.3	0.8	0.54	200	MLG0402P2N5BT000
2.5	±0.2nH	8	500	7.0	10.3	0.8	0.54	200	MLG0402P2N5CT000
2.5	±0.3nH	8	500	7.0	10.3	0.8	0.54	200	MLG0402P2N5ST000
2.6	±0.1nH	8	500	7.0	9.7	0.8	0.54	200	MLG0402P2N6BT000
2.6	±0.2nH	8	500	7.0	9.7	0.8	0.54	200	MLG0402P2N6CT000
2.6	±0.3nH	8	500	7.0	9.7	0.8	0.54	200	MLG0402P2N6ST000
2.7	±0.1nH	8	500	7.0	9.9	0.8	0.54	200	MLG0402P2N7BT000
2.7	±0.2nH	8	500	7.0	9.9	0.8	0.54	200	MLG0402P2N7CT000
2.7	±0.3nH	8	500	7.0	9.9	0.8	0.54	200	MLG0402P2N7ST000
2.8	±0.1nH	8	500	7.0	9.2	0.8	0.52	200	MLG0402P2N8BT000
2.8	±0.2nH	8	500	7.0	9.2	0.8	0.52	200	MLG0402P2N8CT000
2.8	±0.3nH	8	500	7.0	9.2	0.8	0.52	200	MLG0402P2N8ST000
2.9	±0.1nH	8	500	7.0	9.6	0.8	0.45	200	MLG0402P2N9BT000
2.9	±0.2nH	8	500	7.0	9.6	0.8	0.45	200	MLG0402P2N9CT000
2.9	±0.3nH	8	500	7.0	9.6	0.8	0.45	200	MLG0402P2N9ST000
3.0	±0.1nH	8	500	7.0	9.2	0.9	0.58	200	MLG0402P3N0BT000
3.0	±0.2nH	8	500	7.0	9.2	0.9	0.58	200	MLG0402P3N0CT000
3.0	±0.3nH	8	500	7.0	9.2	0.9	0.58	200	MLG0402P3N0ST000
3.1	±0.1nH	8	500	7.0	9.2	1.0	0.66	200	MLG0402P3N1BT000
3.1	±0.2nH	8	500	7.0	9.2	1.0	0.66	200	MLG0402P3N1CT000
3.1	±0.3nH	8	500	7.0	9.2	1.0	0.66	200	MLG0402P3N1ST000
3.2	±0.1nH	8	500	7.0	9.1	1.1	0.73	180	MLG0402P3N2BT000
3.2	±0.2nH	8	500	7.0	9.1	1.1	0.73	180	MLG0402P3N2CT000
3.2	±0.3nH	8	500	7.0	9.1	1.1	0.73	180	MLG0402P3N2ST000

* Short bar residual inductance = 0.11nH

○ Measurement equipment

Measurement item	Product No.	Manufacturer
L, Q	4291B+16196D	Keysight Technologies
Self-resonant frequency	8720C	Keysight Technologies
DC resistance	4338A	Keysight Technologies

* Equivalent measurement equipment may be used.

MLG0402P Type

ELECTRICAL CHARACTERISTICS

CHARACTERISTICS SPECIFICATION TABLE

L	Q	L, Q measuring frequency	Self-resonant frequency		DC resistance		Rated current	Part No.*	
(nH)	Tolerance	min.	(MHz)	(GHz)min.	(GHz)typ.	(Ω)max.	(Ω)typ.	(mA)max.	
3.3	±0.1nH	8	500	6.5	8.6	1.1	0.73	180	MLG0402P3N3BT000
3.3	±0.2nH	8	500	6.5	8.6	1.1	0.73	180	MLG0402P3N3CT000
3.3	±0.3nH	8	500	6.5	8.6	1.1	0.73	180	MLG0402P3N3ST000
3.4	±0.1nH	8	500	6.0	8.6	1.1	0.74	180	MLG0402P3N4BT000
3.4	±0.2nH	8	500	6.0	8.6	1.1	0.74	180	MLG0402P3N4CT000
3.4	±0.3nH	8	500	6.0	8.6	1.1	0.74	180	MLG0402P3N4ST000
3.5	±0.1nH	8	500	6.0	8.3	1.1	0.75	180	MLG0402P3N5BT000
3.5	±0.2nH	8	500	6.0	8.3	1.1	0.75	180	MLG0402P3N5CT000
3.5	±0.3nH	8	500	6.0	8.3	1.1	0.75	180	MLG0402P3N5ST000
3.6	±0.1nH	8	500	6.0	8.3	1.1	0.73	180	MLG0402P3N6BT000
3.6	±0.2nH	8	500	6.0	8.3	1.1	0.73	180	MLG0402P3N6CT000
3.6	±0.3nH	8	500	6.0	8.3	1.1	0.73	180	MLG0402P3N6ST000
3.7	±0.1nH	8	500	6.0	8.0	1.1	0.70	180	MLG0402P3N7BT000
3.7	±0.2nH	8	500	6.0	8.0	1.1	0.70	180	MLG0402P3N7CT000
3.7	±0.3nH	8	500	6.0	8.0	1.1	0.70	180	MLG0402P3N7ST000
3.8	±0.1nH	8	500	6.0	7.8	1.2	0.77	180	MLG0402P3N8BT000
3.8	±0.2nH	8	500	6.0	7.8	1.2	0.77	180	MLG0402P3N8CT000
3.8	±0.3nH	8	500	6.0	7.8	1.2	0.77	180	MLG0402P3N8ST000
3.9	±0.1nH	8	500	6.0	7.6	1.2	0.71	180	MLG0402P3N9BT000
3.9	±0.2nH	8	500	6.0	7.6	1.2	0.71	180	MLG0402P3N9CT000
3.9	±0.3nH	8	500	6.0	7.6	1.2	0.71	180	MLG0402P3N9ST000
4.0	±0.1nH	8	500	6.0	7.5	1.2	0.73	180	MLG0402P4N0BT000
4.0	±0.2nH	8	500	6.0	7.5	1.2	0.73	180	MLG0402P4N0CT000
4.0	±0.3nH	8	500	6.0	7.5	1.2	0.73	180	MLG0402P4N0ST000
4.1	±0.1nH	8	500	6.0	7.9	1.2	0.75	180	MLG0402P4N1BT000
4.1	±0.2nH	8	500	6.0	7.9	1.2	0.75	180	MLG0402P4N1CT000
4.1	±0.3nH	8	500	6.0	7.9	1.2	0.75	180	MLG0402P4N1ST000
4.2	±0.1nH	8	500	6.0	7.9	1.2	0.77	180	MLG0402P4N2BT000
4.2	±0.2nH	8	500	6.0	7.9	1.2	0.77	180	MLG0402P4N2CT000
4.2	±0.3nH	8	500	6.0	7.9	1.2	0.77	180	MLG0402P4N2ST000
4.3	±0.3nH	8	500	6.0	8.0	1.2	0.80	180	MLG0402P4N3ST000
4.3	±3%	8	500	6.0	8.0	1.2	0.80	180	MLG0402P4N3HT000
4.3	±5%	8	500	6.0	8.0	1.2	0.80	180	MLG0402P4N3JT000
4.7	±0.3nH	8	500	5.0	7.2	1.3	0.88	160	MLG0402P4N7ST000
4.7	±3%	8	500	5.0	7.2	1.3	0.88	160	MLG0402P4N7HT000
4.7	±5%	8	500	5.0	7.2	1.3	0.88	160	MLG0402P4N7JT000
5.1	±0.3nH	8	500	5.0	7.0	1.4	0.90	160	MLG0402P5N1ST000
5.1	±3%	8	500	5.0	7.0	1.4	0.90	160	MLG0402P5N1HT000
5.1	±5%	8	500	5.0	7.0	1.4	0.90	160	MLG0402P5N1JT000
5.6	±0.3nH	8	500	5.0	6.8	1.5	1.02	140	MLG0402P5N6ST000
5.6	±3%	8	500	5.0	6.8	1.5	1.02	140	MLG0402P5N6HT000
5.6	±5%	8	500	5.0	6.8	1.5	1.02	140	MLG0402P5N6JT000
6.2	±3%	8	500	4.5	6.5	1.5	1.04	140	MLG0402P6N2HT000
6.2	±5%	8	500	4.5	6.5	1.5	1.04	140	MLG0402P6N2JT000

* Short bar residual inductance =0.11nH

○ Measurement equipment

Measurement item	Product No.	Manufacturer
L, Q	4291B+16196D	Keysight Technologies
Self-resonant frequency	8720C	Keysight Technologies
DC resistance	4338A	Keysight Technologies

* Equivalent measurement equipment may be used.

MLG0402P Type

ELECTRICAL CHARACTERISTICS

CHARACTERISTICS SPECIFICATION TABLE

L (nH)	Tolerance	Q min.	L, Q measuring frequency (MHz)	Self-resonant frequency		DC resistance		Rated current (mA)max.	Part No.*
				(GHz)min.	(GHz)typ.	(Ω)max.	(Ω)typ.		
6.8	±3%	8	500	4.3	5.8	1.6	1.12	140	MLG0402P6N8HT000
6.8	±5%	8	500	4.3	5.8	1.6	1.12	140	MLG0402P6N8JT000
7.5	±3%	8	500	4.2	5.7	1.7	1.13	140	MLG0402P7N5HT000
7.5	±5%	8	500	4.2	5.7	1.7	1.13	140	MLG0402P7N5JT000
8.2	±3%	8	500	4.0	5.5	1.8	1.16	140	MLG0402P8N2HT000
8.2	±5%	8	500	4.0	5.5	1.8	1.16	140	MLG0402P8N2JT000
9.1	±3%	8	500	4.0	5.5	1.8	1.20	140	MLG0402P9N1HT000
9.1	±5%	8	500	4.0	5.5	1.8	1.20	140	MLG0402P9N1JT000
10.0	±3%	8	500	3.6	4.7	2.1	1.45	140	MLG0402P10NHT000
10.0	±5%	8	500	3.6	4.7	2.1	1.45	140	MLG0402P10NJT000
11.0	±3%	8	500	3.5	4.6	2.2	1.51	140	MLG0402P11NHT000
11.0	±5%	8	500	3.5	4.6	2.2	1.51	140	MLG0402P11NJT000
12.0	±3%	8	500	3.4	4.5	2.4	1.64	140	MLG0402P12NHT000
12.0	±5%	8	500	3.4	4.5	2.4	1.64	140	MLG0402P12NJT000
13.0	±3%	8	500	3.2	4.3	2.5	1.71	140	MLG0402P13NHT000
13.0	±5%	8	500	3.2	4.3	2.5	1.71	140	MLG0402P13NJT000
15.0	±3%	8	500	3.0	3.9	2.6	1.77	140	MLG0402P15NHT000
15.0	±5%	8	500	3.0	3.9	2.6	1.77	140	MLG0402P15NJT000
16.0	±3%	7	500	2.4	3.4	2.7	1.79	140	MLG0402P16NHT000
16.0	±5%	7	500	2.4	3.4	2.7	1.79	140	MLG0402P16NJT000
18.0	±3%	7	500	2.3	3.2	2.8	1.94	140	MLG0402P18NHT000
18.0	±5%	7	500	2.3	3.2	2.8	1.94	140	MLG0402P18NJT000
20.0	±3%	7	500	2.2	2.8	3.0	2.09	130	MLG0402P20NHT000
20.0	±5%	7	500	2.2	2.8	3.0	2.09	130	MLG0402P20NJT000
22.0	±3%	7	500	2.0	2.7	3.2	2.18	130	MLG0402P22NHT000
22.0	±5%	7	500	2.0	2.7	3.2	2.18	130	MLG0402P22NJT000
24.0	±3%	7	500	2.0	2.6	3.2	2.30	120	MLG0402P24NHT000
24.0	±5%	7	500	2.0	2.6	3.2	2.30	120	MLG0402P24NJT000
27.0	±3%	7	500	1.8	2.3	3.5	2.44	120	MLG0402P27NHT000
27.0	±5%	7	500	1.8	2.3	3.5	2.44	120	MLG0402P27NJT000
30.0	±3%	7	500	1.7	2.2	3.6	2.56	120	MLG0402P30NHT000
30.0	±5%	7	500	1.7	2.2	3.6	2.56	120	MLG0402P30NJT000
33.0	±3%	6	300	1.4	1.9	3.8	2.71	120	MLG0402P33NHT000
33.0	±5%	6	300	1.4	1.9	3.8	2.71	120	MLG0402P33NJT000

* Short bar residual inductance =0.11nH

○ Measurement equipment

Measurement item	Product No.	Manufacturer
L, Q	4291B+16196D	Keysight Technologies
Self-resonant frequency	8720C	Keysight Technologies
DC resistance	4338A	Keysight Technologies

* Equivalent measurement equipment may be used.

MLG0402P Type

ELECTRICAL CHARACTERISTICS

L, Q FREQUENCY CHARACTERISTICS TABLE

L(nH)typ.					Q typ.					Part No.
500MHz	800MHz	1.8GHz	2.0GHz	2.4GHz	500MHz	800MHz	1.8GHz	2.0GHz	2.4GHz	
0.2	0.2	0.2	0.2	0.2	12	15	23	25	29	MLG0402P0N2BT000
0.2	0.2	0.2	0.2	0.2	12	15	23	25	29	MLG0402P0N2CT000
0.3	0.3	0.3	0.3	0.3	17	22	35	39	44	MLG0402P0N3BT000
0.3	0.3	0.3	0.3	0.3	17	22	35	39	44	MLG0402P0N3CT000
0.4	0.4	0.4	0.4	0.4	12	15	22	24	26	MLG0402P0N4BT000
0.4	0.4	0.4	0.4	0.4	12	15	22	24	26	MLG0402P0N4CT000
0.4	0.4	0.4	0.4	0.4	12	15	22	24	26	MLG0402P0N4ST000
0.5	0.5	0.5	0.5	0.5	12	16	25	27	30	MLG0402P0N5BT000
0.5	0.5	0.5	0.5	0.5	12	16	25	27	30	MLG0402P0N5CT000
0.5	0.5	0.5	0.5	0.5	12	16	25	27	30	MLG0402P0N5ST000
0.6	0.6	0.6	0.6	0.6	11	15	23	26	29	MLG0402P0N6BT000
0.6	0.6	0.6	0.6	0.6	11	15	23	26	29	MLG0402P0N6CT000
0.6	0.6	0.6	0.6	0.6	11	15	23	26	29	MLG0402P0N6ST000
0.7	0.7	0.7	0.7	0.7	10	14	22	25	28	MLG0402P0N7BT000
0.7	0.7	0.7	0.7	0.7	10	14	22	25	28	MLG0402P0N7CT000
0.7	0.7	0.7	0.7	0.7	10	14	22	25	28	MLG0402P0N7ST000
0.8	0.8	0.8	0.8	0.8	12	15	23	25	27	MLG0402P0N8BT000
0.8	0.8	0.8	0.8	0.8	12	15	23	25	27	MLG0402P0N8CT000
0.8	0.8	0.8	0.8	0.8	12	15	23	25	27	MLG0402P0N8ST000
0.9	0.9	0.9	0.9	0.9	12	15	23	25	27	MLG0402P0N9BT000
0.9	0.9	0.9	0.9	0.9	12	15	23	25	27	MLG0402P0N9CT000
0.9	0.9	0.9	0.9	0.9	12	15	23	25	27	MLG0402P0N9ST000
1.0	1.0	1.0	1.0	1.0	12	16	24	26	29	MLG0402P1N0BT000
1.0	1.0	1.0	1.0	1.0	12	16	24	26	29	MLG0402P1N0CT000
1.0	1.0	1.0	1.0	1.0	12	16	24	26	29	MLG0402P1N0ST000
1.1	1.1	1.1	1.1	1.1	12	15	23	25	28	MLG0402P1N1BT000
1.1	1.1	1.1	1.1	1.1	12	15	23	25	28	MLG0402P1N1CT000
1.1	1.1	1.1	1.1	1.1	12	15	23	25	28	MLG0402P1N1ST000
1.2	1.2	1.2	1.2	1.2	12	15	23	25	27	MLG0402P1N2BT000
1.2	1.2	1.2	1.2	1.2	12	15	23	25	27	MLG0402P1N2CT000
1.2	1.2	1.2	1.2	1.2	12	15	23	25	27	MLG0402P1N2ST000
1.3	1.3	1.3	1.3	1.3	11	14	23	25	28	MLG0402P1N3BT000
1.3	1.3	1.3	1.3	1.3	11	14	23	25	28	MLG0402P1N3CT000
1.3	1.3	1.3	1.3	1.3	11	14	23	25	28	MLG0402P1N3ST000
1.4	1.4	1.4	1.4	1.4	9	12	20	21	24	MLG0402P1N4BT000
1.4	1.4	1.4	1.4	1.4	9	12	20	21	24	MLG0402P1N4CT000
1.4	1.4	1.4	1.4	1.4	9	12	20	21	24	MLG0402P1N4ST000
1.5	1.5	1.5	1.5	1.5	10	13	21	23	25	MLG0402P1N5BT000
1.5	1.5	1.5	1.5	1.5	10	13	21	23	25	MLG0402P1N5CT000
1.5	1.5	1.5	1.5	1.5	10	13	21	23	25	MLG0402P1N5ST000
1.6	1.6	1.6	1.6	1.6	12	15	24	26	29	MLG0402P1N6BT000
1.6	1.6	1.6	1.6	1.6	12	15	24	26	29	MLG0402P1N6CT000
1.6	1.6	1.6	1.6	1.6	12	15	24	26	29	MLG0402P1N6ST000
1.7	1.7	1.7	1.7	1.7	12	15	23	25	28	MLG0402P1N7BT000
1.7	1.7	1.7	1.7	1.7	12	15	23	25	28	MLG0402P1N7CT000
1.7	1.7	1.7	1.7	1.7	12	15	23	25	28	MLG0402P1N7ST000

○ Measurement equipment

Product No.	Manufacturer
4291B+16196D	Keysight Technologies

* Equivalent measurement equipment may be used.

MLG0402P Type

ELECTRICAL CHARACTERISTICS

L, Q FREQUENCY CHARACTERISTICS TABLE

L(nH)typ.					Q typ.					Part No.
500MHz	800MHz	1.8GHz	2.0GHz	2.4GHz	500MHz	800MHz	1.8GHz	2.0GHz	2.4GHz	
1.8	1.8	1.8	1.8	1.8	12	15	24	26	28	MLG0402P1N8BT000
1.8	1.8	1.8	1.8	1.8	12	15	24	26	28	MLG0402P1N8CT000
1.8	1.8	1.8	1.8	1.8	12	15	24	26	28	MLG0402P1N8ST000
1.9	1.9	1.9	1.9	1.9	11	15	23	24	27	MLG0402P1N9BT000
1.9	1.9	1.9	1.9	1.9	11	15	23	24	27	MLG0402P1N9CT000
1.9	1.9	1.9	1.9	1.9	11	15	23	24	27	MLG0402P1N9ST000
2.0	2.0	2.0	2.0	2.0	12	15	24	26	28	MLG0402P2N0BT000
2.0	2.0	2.0	2.0	2.0	12	15	24	26	28	MLG0402P2N0CT000
2.0	2.0	2.0	2.0	2.0	12	15	24	26	28	MLG0402P2N0ST000
2.1	2.1	2.1	2.1	2.1	12	15	24	26	29	MLG0402P2N1BT000
2.1	2.1	2.1	2.1	2.1	12	15	24	26	29	MLG0402P2N1CT000
2.1	2.1	2.1	2.1	2.1	12	15	24	26	29	MLG0402P2N1ST000
2.2	2.2	2.2	2.2	2.2	11	14	23	24	27	MLG0402P2N2BT000
2.2	2.2	2.2	2.2	2.2	11	14	23	24	27	MLG0402P2N2CT000
2.2	2.2	2.2	2.2	2.2	11	14	23	24	27	MLG0402P2N2ST000
2.3	2.3	2.3	2.3	2.3	11	14	22	24	26	MLG0402P2N3BT000
2.3	2.3	2.3	2.3	2.3	11	14	22	24	26	MLG0402P2N3CT000
2.3	2.3	2.3	2.3	2.3	11	14	22	24	26	MLG0402P2N3ST000
2.4	2.4	2.4	2.4	2.4	11	14	22	24	26	MLG0402P2N4BT000
2.4	2.4	2.4	2.4	2.4	11	14	22	24	26	MLG0402P2N4CT000
2.4	2.4	2.4	2.4	2.4	11	14	22	24	26	MLG0402P2N4ST000
2.5	2.5	2.5	2.5	2.5	10	13	21	23	25	MLG0402P2N5BT000
2.5	2.5	2.5	2.5	2.5	10	13	21	23	25	MLG0402P2N5CT000
2.5	2.5	2.5	2.5	2.5	10	13	21	23	25	MLG0402P2N5ST000
2.6	2.6	2.6	2.6	2.6	10	13	21	23	25	MLG0402P2N6BT000
2.6	2.6	2.6	2.6	2.6	10	13	21	23	25	MLG0402P2N6CT000
2.6	2.6	2.6	2.6	2.6	10	13	21	23	25	MLG0402P2N6ST000
2.7	2.7	2.6	2.6	2.7	11	14	22	24	26	MLG0402P2N7BT000
2.7	2.7	2.6	2.6	2.7	11	14	22	24	26	MLG0402P2N7CT000
2.7	2.7	2.6	2.6	2.7	11	14	22	24	26	MLG0402P2N7ST000
2.8	2.8	2.8	2.8	2.8	11	14	21	23	25	MLG0402P2N8BT000
2.8	2.8	2.8	2.8	2.8	11	14	21	23	25	MLG0402P2N8CT000
2.8	2.8	2.8	2.8	2.8	11	14	21	23	25	MLG0402P2N8ST000
2.9	2.9	2.8	2.9	2.9	11	14	21	23	25	MLG0402P2N9BT000
2.9	2.9	2.8	2.9	2.9	11	14	21	23	25	MLG0402P2N9CT000
2.9	2.9	2.8	2.9	2.9	11	14	21	23	25	MLG0402P2N9ST000
3.0	3.0	2.9	3.0	3.0	11	14	20	22	24	MLG0402P3N0BT000
3.0	3.0	2.9	3.0	3.0	11	14	20	22	24	MLG0402P3N0CT000
3.0	3.0	2.9	3.0	3.0	11	14	20	22	24	MLG0402P3N0ST000
3.1	3.0	2.9	3.0	3.0	11	14	20	22	24	MLG0402P3N1BT000
3.1	3.0	2.9	3.0	3.0	11	14	20	22	24	MLG0402P3N1CT000
3.1	3.0	2.9	3.0	3.0	11	14	20	22	24	MLG0402P3N1ST000
3.2	3.2	3.1	3.2	3.2	10	14	21	22	25	MLG0402P3N2BT000
3.2	3.2	3.1	3.2	3.2	10	14	21	22	25	MLG0402P3N2CT000
3.2	3.2	3.1	3.2	3.2	10	14	21	22	25	MLG0402P3N2ST000

○ Measurement equipment

Product No.	Manufacturer
4291B+16196D	Keysight Technologies

* Equivalent measurement equipment may be used.

MLG0402P Type

ELECTRICAL CHARACTERISTICS

L, Q FREQUENCY CHARACTERISTICS TABLE

L(nH)typ.					Q typ.					Part No.
500MHz	800MHz	1.8GHz	2.0GHz	2.4GHz	500MHz	800MHz	1.8GHz	2.0GHz	2.4GHz	
3.3	3.3	3.3	3.3	3.3	10	13	21	22	24	MLG0402P3N3BT000
3.3	3.3	3.3	3.3	3.3	10	13	21	22	24	MLG0402P3N3CT000
3.3	3.3	3.3	3.3	3.3	10	13	21	22	24	MLG0402P3N3ST000
3.4	3.4	3.4	3.4	3.4	10	13	20	21	23	MLG0402P3N4BT000
3.4	3.4	3.4	3.4	3.4	10	13	20	21	23	MLG0402P3N4CT000
3.4	3.4	3.4	3.4	3.4	10	13	20	21	23	MLG0402P3N4ST000
3.5	3.5	3.5	3.5	3.6	10	13	20	22	24	MLG0402P3N5BT000
3.5	3.5	3.5	3.5	3.6	10	13	20	22	24	MLG0402P3N5CT000
3.5	3.5	3.5	3.5	3.6	10	13	20	22	24	MLG0402P3N5ST000
3.6	3.6	3.6	3.6	3.6	10	13	20	21	23	MLG0402P3N6BT000
3.6	3.6	3.6	3.6	3.6	10	13	20	21	23	MLG0402P3N6CT000
3.6	3.6	3.6	3.6	3.6	10	13	20	21	23	MLG0402P3N6ST000
3.7	3.6	3.7	3.7	3.7	10	13	19	21	22	MLG0402P3N7BT000
3.7	3.6	3.7	3.7	3.7	10	13	19	21	22	MLG0402P3N7CT000
3.7	3.6	3.7	3.7	3.7	10	13	19	21	22	MLG0402P3N7ST000
3.8	3.7	3.8	3.8	3.8	10	13	20	21	23	MLG0402P3N8BT000
3.8	3.7	3.8	3.8	3.8	10	13	20	21	23	MLG0402P3N8CT000
3.8	3.7	3.8	3.8	3.8	10	13	20	21	23	MLG0402P3N8ST000
3.9	3.9	3.9	4.0	4.1	10	13	19	20	21	MLG0402P3N9BT000
3.9	3.9	3.9	4.0	4.1	10	13	19	20	21	MLG0402P3N9CT000
3.9	3.9	3.9	4.0	4.1	10	13	19	20	21	MLG0402P3N9ST000
4.0	3.9	4.0	4.0	4.1	10	12	18	19	21	MLG0402P4N0BT000
4.0	3.9	4.0	4.0	4.1	10	12	18	19	21	MLG0402P4N0CT000
4.0	3.9	4.0	4.0	4.1	10	12	18	19	21	MLG0402P4N0ST000
4.1	4.1	4.1	4.1	4.2	11	14	22	23	26	MLG0402P4N1BT000
4.1	4.1	4.1	4.1	4.2	11	14	22	23	26	MLG0402P4N1CT000
4.1	4.1	4.1	4.1	4.2	11	14	22	23	26	MLG0402P4N1ST000
4.2	4.1	4.2	4.2	4.3	11	14	21	23	25	MLG0402P4N2BT000
4.2	4.1	4.2	4.2	4.3	11	14	21	23	25	MLG0402P4N2CT000
4.2	4.1	4.2	4.2	4.3	11	14	21	23	25	MLG0402P4N2ST000
4.3	4.2	4.3	4.3	4.4	10	13	20	22	24	MLG0402P4N3ST000
4.3	4.2	4.3	4.3	4.4	10	13	20	22	24	MLG0402P4N3HT000
4.3	4.2	4.3	4.3	4.4	10	13	20	22	24	MLG0402P4N3JT000
4.7	4.6	4.7	4.8	4.9	11	14	21	22	24	MLG0402P4N7ST000
4.7	4.6	4.7	4.8	4.9	11	14	21	22	24	MLG0402P4N7HT000
4.7	4.6	4.7	4.8	4.9	11	14	21	22	24	MLG0402P4N7JT000
5.1	5.0	5.1	5.2	5.3	10	13	20	21	22	MLG0402P5N1ST000
5.1	5.0	5.1	5.2	5.3	10	13	20	21	22	MLG0402P5N1HT000
5.1	5.0	5.1	5.2	5.3	10	13	20	21	22	MLG0402P5N1JT000
5.6	5.5	5.7	5.8	5.9	11	14	21	22	24	MLG0402P5N6ST000
5.6	5.5	5.7	5.8	5.9	11	14	21	22	24	MLG0402P5N6HT000
5.6	5.5	5.7	5.8	5.9	11	14	21	22	24	MLG0402P5N6JT000
6.2	6.1	6.3	6.4	6.6	11	14	20	21	22	MLG0402P6N2HT000
6.2	6.1	6.3	6.4	6.6	11	14	20	21	22	MLG0402P6N2JT000

○ Measurement equipment

Product No.	Manufacturer
4291B+16196D	Keysight Technologies

* Equivalent measurement equipment may be used.

MLG0402P Type

ELECTRICAL CHARACTERISTICS

L, Q FREQUENCY CHARACTERISTICS TABLE

L(nH)typ.					Q typ.					Part No.
500MHz	800MHz	1.8GHz	2.0GHz	2.4GHz	500MHz	800MHz	1.8GHz	2.0GHz	2.4GHz	
6.8	6.7	6.9	7.1	7.3	11	14	20	21	23	MLG0402P6N8HT000
6.8	6.7	6.9	7.1	7.3	11	14	20	21	23	MLG0402P6N8JT000
7.5	7.4	7.7	7.8	8.1	11	14	20	21	22	MLG0402P7N5HT000
7.5	7.4	7.7	7.8	8.1	11	14	20	21	22	MLG0402P7N5JT000
8.2	8.1	8.5	8.7	9.1	11	14	20	21	22	MLG0402P8N2HT000
8.2	8.1	8.5	8.7	9.1	11	14	20	21	22	MLG0402P8N2JT000
9.1	9.0	9.5	9.8	10.3	12	15	21	22	22	MLG0402P9N1HT000
9.1	9.0	9.5	9.8	10.3	12	15	21	22	22	MLG0402P9N1JT000
10.0	10.0	10.6	10.9	11.6	11	14	20	21	22	MLG0402P10NHT000
10.0	10.0	10.6	10.9	11.6	11	14	20	21	22	MLG0402P10NJT000
11.0	11.0	11.7	12.1	12.9	11	14	19	20	20	MLG0402P11NHT000
11.0	11.0	11.7	12.1	12.9	11	14	19	20	20	MLG0402P11NJT000
12.0	12.0	13.1	13.6	14.9	11	14	18	19	19	MLG0402P12NHT000
12.0	12.0	13.1	13.6	14.9	11	14	18	19	19	MLG0402P12NJT000
13.0	13.0	14.3	15.0	16.6	11	14	18	18	18	MLG0402P13NHT000
13.0	13.0	14.3	15.0	16.6	11	14	18	18	18	MLG0402P13NJT000
15.0	15.0	16.6	17.4	19.3	11	14	17	18	17	MLG0402P15NHT000
15.0	15.0	16.6	17.4	19.3	11	14	17	18	17	MLG0402P15NJT000
16.0	16.2	19.3	21.1	25.5	11	13	16	16	14	MLG0402P16NHT000
16.0	16.2	19.3	21.1	25.5	11	13	16	16	14	MLG0402P16NJT000
18.0	18.3	22.6	25.1	31.8	11	13	15	15	12	MLG0402P18NHT000
18.0	18.3	22.6	25.1	31.8	11	13	15	15	12	MLG0402P18NJT000
20.0	20.4	26.1	29.6		11	13	14	13		MLG0402P20NHT000
20.0	20.4	26.1	29.6		11	13	14	13		MLG0402P20NJT000
22.0	22.6	30.2	35.3		10	12	13	12		MLG0402P22NHT000
22.0	22.6	30.2	35.3		10	12	13	12		MLG0402P22NJT000
24.0	24.7	34.9			10	12	11			MLG0402P24NHT000
24.0	24.7	34.9			10	12	11			MLG0402P24NJT000
27.0	28.0	41.8			10	12	11			MLG0402P27NHT000
27.0	28.0	41.8			10	12	11			MLG0402P27NJT000
30.0	31.7				10	11				MLG0402P30NHT000
30.0	31.7				10	11				MLG0402P30NJT000
33.0	35.0				10	12				MLG0402P33NHT000
33.0	35.0				10	12				MLG0402P33NJT000

○ Measurement equipment

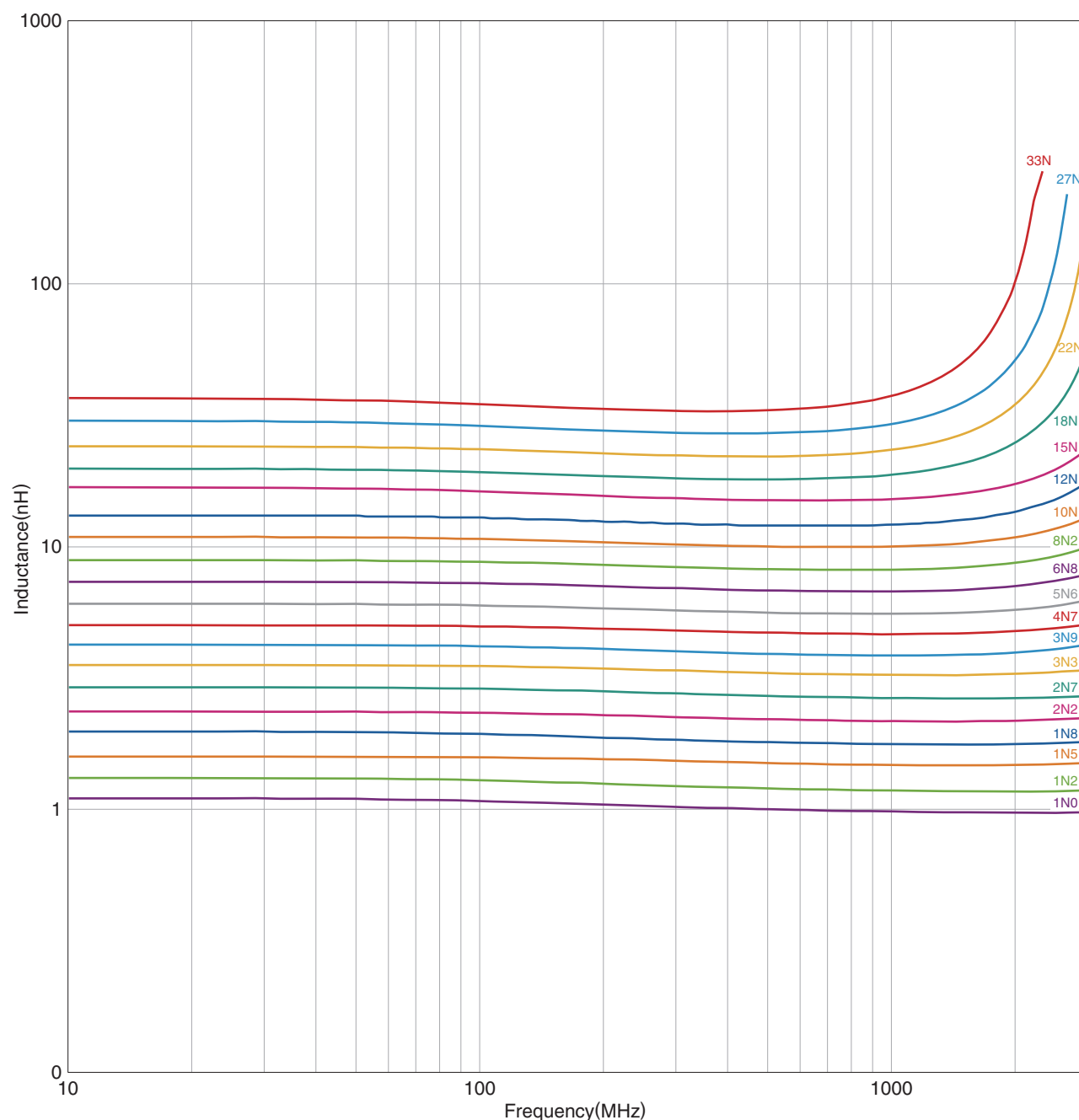
Product No.	Manufacturer
4291B+16196D	Keysight Technologies

* Equivalent measurement equipment may be used.

MLG0402P Type

ELECTRICAL CHARACTERISTICS

L FREQUENCY CHARACTERISTICS GRAPH (EXAMPLE)



○ Measurement equipment

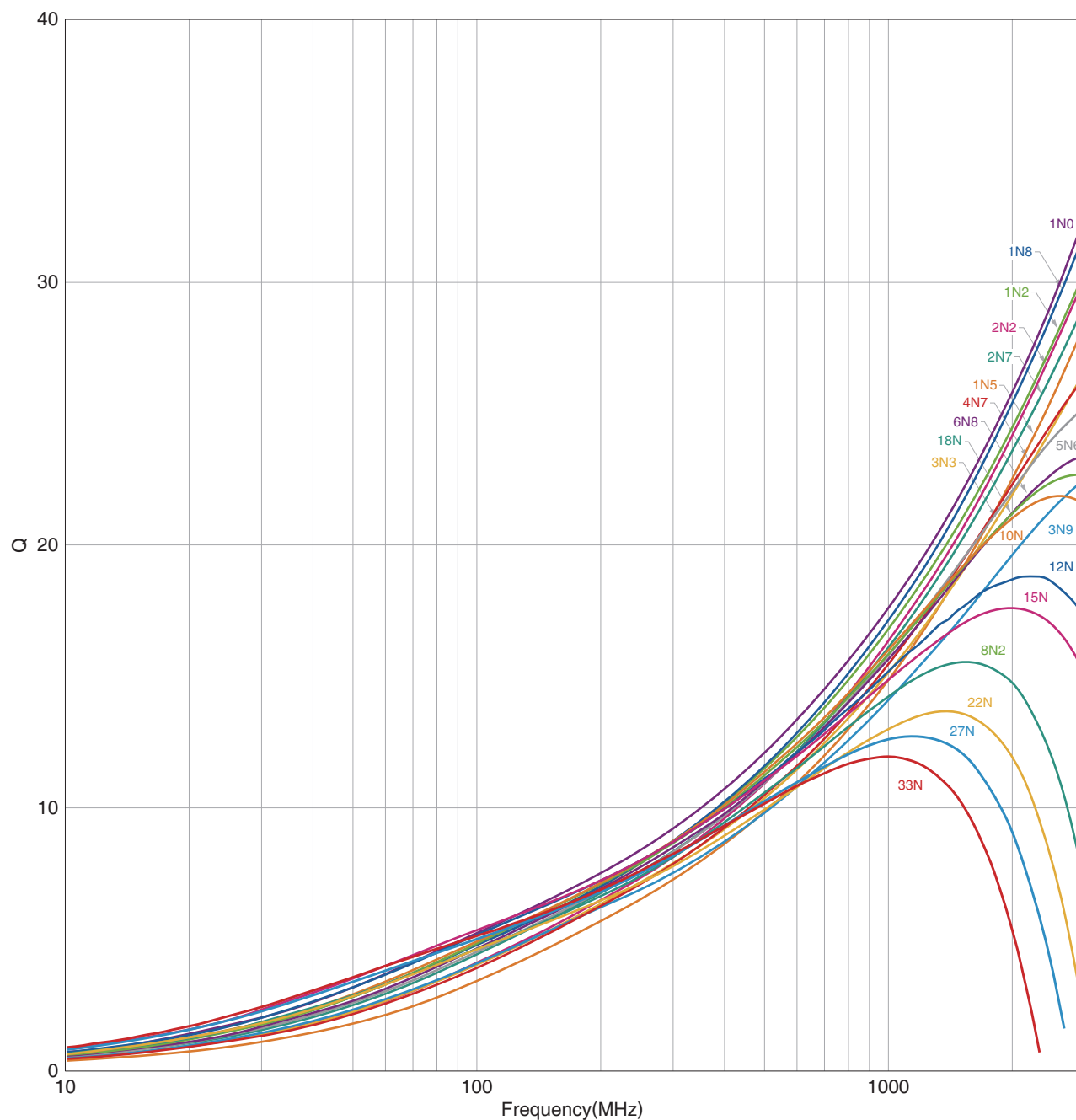
Product No.	Manufacturer
E4991A+16196D	Keysight Technologies

* Equivalent measurement equipment may be used.

MLG0402P Type

ELECTRICAL CHARACTERISTICS

Q FREQUENCY CHARACTERISTICS GRAPH (EXAMPLE)



○ Measurement equipment

Product No.	Manufacturer
E4991A+16196D	Keysight Technologies

* Equivalent measurement equipment may be used.

□ REEL DIMENSIONS



The diagram illustrates the drawing process of a tube. The top part shows a cross-section of the tube with various dimensions and features. The bottom part shows a longitudinal view of the tube with dimensions and a drawing direction arrow.

Top View Dimensions and Features:

- Sprocket hole
- 1.5 $^{+0.1}_{-0.1}$
- Cavity
- 1.75 ± 0.1
- 3.5 ± 0.05
- 8.0 ± 0.3
- A
- B
- 4.0 ± 0.1
- 2.0 ± 0.05
- 2.0 ± 0.05
- K

Bottom View Dimensions and Features:

- 160min.
- Taping
- 200min.
- 300min.
- Drawing direction
- Marking

Type	A	B	K
MLG0402P	0.46±0.04	0.26±0.04	0.4 max.

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