

Inductors for high frequency circuits
Multilayer ceramic
MLG-P series



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.
- Operating temperature range: -55 to +125°C

APPLICATION

- Smart phones, tablet terminals, high frequency modules, Bluetooth, W-LAN, UWB, tuners and other high frequency circuits for the mobile communication industry
- Application guides: [Smart phones/tablets](#)

PART NUMBER CONSTRUCTION

MLG	0402	P	0N2	B	T	000
Series name	L×W×H dimensions 0.4×0.2×0.2 mm	Characteristics	Inductance (nH)	Inductance tolerance	Packaging style	Internal code



MLG0402P type

CHARACTERISTICS SPECIFICATION TABLE

L (nH)	Q 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.		
0.2	± 0.1 nH	—	500	10.0	20.0	0.1	0.03	350	MLG0402P0N2BT000
0.2	± 0.2 nH	—	500	10.0	20.0	0.1	0.03	350	MLG0402P0N2CT000
0.3	± 0.1 nH	—	500	10.0	20.0	0.1	0.03	350	MLG0402P0N3BT000
0.3	± 0.2 nH	—	500	10.0	20.0	0.1	0.03	350	MLG0402P0N3CT000
0.4	± 0.1 nH	—	500	10.0	20.0	0.2	0.07	350	MLG0402P0N4BT000
0.4	± 0.2 nH	—	500	10.0	20.0	0.2	0.07	350	MLG0402P0N4CT000
0.4	± 0.3 nH	—	500	10.0	20.0	0.2	0.07	350	MLG0402P0N4ST000
0.5	± 0.1 nH	—	500	10.0	20.0	0.2	0.08	350	MLG0402P0N5BT000
0.5	± 0.2 nH	—	500	10.0	20.0	0.2	0.08	350	MLG0402P0N5CT000
0.5	± 0.3 nH	—	500	10.0	20.0	0.2	0.08	350	MLG0402P0N5ST000
0.6	± 0.1 nH	—	500	10.0	20.0	0.2	0.11	350	MLG0402P0N6BT000
0.6	± 0.2 nH	—	500	10.0	20.0	0.2	0.11	350	MLG0402P0N6CT000
0.6	± 0.3 nH	—	500	10.0	20.0	0.2	0.11	350	MLG0402P0N6ST000
0.7	± 0.1 nH	—	500	10.0	20.0	0.3	0.13	320	MLG0402P0N7BT000
0.7	± 0.2 nH	—	500	10.0	20.0	0.3	0.13	320	MLG0402P0N7CT000
0.7	± 0.3 nH	—	500	10.0	20.0	0.3	0.13	320	MLG0402P0N7ST000
0.8	± 0.1 nH	—	500	10.0	18.3	0.4	0.11	320	MLG0402P0N8BT000
0.8	± 0.2 nH	—	500	10.0	18.3	0.4	0.11	320	MLG0402P0N8CT000
0.8	± 0.3 nH	—	500	10.0	18.3	0.4	0.11	320	MLG0402P0N8ST000
0.9	± 0.1 nH	—	500	10.0	17.3	0.4	0.15	320	MLG0402P0N9BT000
0.9	± 0.2 nH	—	500	10.0	17.3	0.4	0.15	320	MLG0402P0N9CT000
0.9	± 0.3 nH	—	500	10.0	17.3	0.4	0.15	320	MLG0402P0N9ST000
1.0	± 0.1 nH	8	500	10.0	16.5	0.4	0.20	250	MLG0402P1N0BT000
1.0	± 0.2 nH	8	500	10.0	16.5	0.4	0.20	250	MLG0402P1N0CT000
1.0	± 0.3 nH	8	500	10.0	16.5	0.4	0.20	250	MLG0402P1N0ST000
1.1	± 0.1 nH	8	500	10.0	15.0	0.5	0.22	250	MLG0402P1N1BT000
1.1	± 0.2 nH	8	500	10.0	15.0	0.5	0.22	250	MLG0402P1N1CT000
1.1	± 0.3 nH	8	500	10.0	15.0	0.5	0.22	250	MLG0402P1N1ST000
1.2	± 0.1 nH	8	500	10.0	14.8	0.5	0.25	250	MLG0402P1N2BT000
1.2	± 0.2 nH	8	500	10.0	14.8	0.5	0.25	250	MLG0402P1N2CT000
1.2	± 0.3 nH	8	500	10.0	14.8	0.5	0.25	250	MLG0402P1N2ST000
1.3	± 0.1 nH	8	500	10.0	15.9	0.6	0.28	250	MLG0402P1N3BT000
1.3	± 0.2 nH	8	500	10.0	15.9	0.6	0.28	250	MLG0402P1N3CT000
1.3	± 0.3 nH	8	500	10.0	15.9	0.6	0.28	250	MLG0402P1N3ST000
1.4	± 0.1 nH	7	500	10.0	14.0	0.6	0.30	250	MLG0402P1N4BT000
1.4	± 0.2 nH	7	500	10.0	14.0	0.6	0.30	250	MLG0402P1N4CT000
1.4	± 0.3 nH	7	500	10.0	14.0	0.6	0.30	250	MLG0402P1N4ST000
1.5	± 0.1 nH	8	500	10.0	14.0	0.6	0.37	220	MLG0402P1N5BT000
1.5	± 0.2 nH	8	500	10.0	14.0	0.6	0.37	220	MLG0402P1N5CT000
1.5	± 0.3 nH	8	500	10.0	14.0	0.6	0.37	220	MLG0402P1N5ST000
1.6	± 0.1 nH	9	500	9.0	12.9	0.6	0.25	220	MLG0402P1N6BT000
1.6	± 0.2 nH	9	500	9.0	12.9	0.6	0.25	220	MLG0402P1N6CT000
1.6	± 0.3 nH	9	500	9.0	12.9	0.6	0.25	220	MLG0402P1N6ST000
1.7	± 0.1 nH	9	500	9.0	12.4	0.6	0.25	200	MLG0402P1N7BT000
1.7	± 0.2 nH	9	500	9.0	12.4	0.6	0.25	200	MLG0402P1N7CT000
1.7	± 0.3 nH	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

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.		
1.8	± 0.1 nH	9	500	8.0	11.5	0.6	0.28	200	MLG0402P1N8BT000
1.8	± 0.2 nH	9	500	8.0	11.5	0.6	0.28	200	MLG0402P1N8CT000
1.8	± 0.3 nH	9	500	8.0	11.5	0.6	0.28	200	MLG0402P1N8ST000
1.9	± 0.1 nH	9	500	8.0	10.5	0.6	0.27	200	MLG0402P1N9BT000
1.9	± 0.2 nH	9	500	8.0	10.5	0.6	0.27	200	MLG0402P1N9CT000
1.9	± 0.3 nH	9	500	8.0	10.5	0.6	0.27	200	MLG0402P1N9ST000
2.0	± 0.1 nH	9	500	8.0	11.0	0.6	0.30	200	MLG0402P2N0BT000
2.0	± 0.2 nH	9	500	8.0	11.0	0.6	0.30	200	MLG0402P2N0CT000
2.0	± 0.3 nH	9	500	8.0	11.0	0.6	0.30	200	MLG0402P2N0ST000
2.1	± 0.1 nH	8	500	8.0	11.5	0.7	0.36	200	MLG0402P2N1BT000
2.1	± 0.2 nH	8	500	8.0	11.5	0.7	0.36	200	MLG0402P2N1CT000
2.1	± 0.3 nH	8	500	8.0	11.5	0.7	0.36	200	MLG0402P2N1ST000
2.2	± 0.1 nH	8	500	8.0	10.7	0.7	0.43	200	MLG0402P2N2BT000
2.2	± 0.2 nH	8	500	8.0	10.7	0.7	0.43	200	MLG0402P2N2CT000
2.2	± 0.3 nH	8	500	8.0	10.7	0.7	0.43	200	MLG0402P2N2ST000
2.3	± 0.1 nH	8	500	7.0	10.3	0.7	0.46	200	MLG0402P2N3BT000
2.3	± 0.2 nH	8	500	7.0	10.3	0.7	0.46	200	MLG0402P2N3CT000
2.3	± 0.3 nH	8	500	7.0	10.3	0.7	0.46	200	MLG0402P2N3ST000
2.4	± 0.1 nH	8	500	7.0	10.2	0.7	0.43	200	MLG0402P2N4BT000
2.4	± 0.2 nH	8	500	7.0	10.2	0.7	0.43	200	MLG0402P2N4CT000
2.4	± 0.3 nH	8	500	7.0	10.2	0.7	0.43	200	MLG0402P2N4ST000
2.5	± 0.1 nH	8	500	7.0	10.3	0.8	0.54	200	MLG0402P2N5BT000
2.5	± 0.2 nH	8	500	7.0	10.3	0.8	0.54	200	MLG0402P2N5CT000
2.5	± 0.3 nH	8	500	7.0	10.3	0.8	0.54	200	MLG0402P2N5ST000
2.6	± 0.1 nH	8	500	7.0	9.7	0.8	0.54	200	MLG0402P2N6BT000
2.6	± 0.2 nH	8	500	7.0	9.7	0.8	0.54	200	MLG0402P2N6CT000
2.6	± 0.3 nH	8	500	7.0	9.7	0.8	0.54	200	MLG0402P2N6ST000
2.7	± 0.1 nH	8	500	7.0	9.9	0.8	0.54	200	MLG0402P2N7BT000
2.7	± 0.2 nH	8	500	7.0	9.9	0.8	0.54	200	MLG0402P2N7CT000
2.7	± 0.3 nH	8	500	7.0	9.9	0.8	0.54	200	MLG0402P2N7ST000
2.8	± 0.1 nH	8	500	7.0	9.2	0.8	0.52	200	MLG0402P2N8BT000
2.8	± 0.2 nH	8	500	7.0	9.2	0.8	0.52	200	MLG0402P2N8CT000
2.8	± 0.3 nH	8	500	7.0	9.2	0.8	0.52	200	MLG0402P2N8ST000
2.9	± 0.1 nH	8	500	7.0	9.6	0.8	0.45	200	MLG0402P2N9BT000
2.9	± 0.2 nH	8	500	7.0	9.6	0.8	0.45	200	MLG0402P2N9CT000
2.9	± 0.3 nH	8	500	7.0	9.6	0.8	0.45	200	MLG0402P2N9ST000
3.0	± 0.1 nH	8	500	7.0	9.2	0.9	0.58	200	MLG0402P3N0BT000
3.0	± 0.2 nH	8	500	7.0	9.2	0.9	0.58	200	MLG0402P3N0CT000
3.0	± 0.3 nH	8	500	7.0	9.2	0.9	0.58	200	MLG0402P3N0ST000
3.1	± 0.1 nH	8	500	7.0	9.2	1.0	0.66	200	MLG0402P3N1BT000
3.1	± 0.2 nH	8	500	7.0	9.2	1.0	0.66	200	MLG0402P3N1CT000
3.1	± 0.3 nH	8	500	7.0	9.2	1.0	0.66	200	MLG0402P3N1ST000
3.2	± 0.1 nH	8	500	7.0	9.1	1.1	0.73	180	MLG0402P3N2BT000
3.2	± 0.2 nH	8	500	7.0	9.1	1.1	0.73	180	MLG0402P3N2CT000
3.2	± 0.3 nH	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

CHARACTERISTICS SPECIFICATION TABLE

L (nH)	Q 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.		
3.3	± 0.1 nH	8	500	6.5	8.6	1.1	0.73	180	MLG0402P3N3BT000
3.3	± 0.2 nH	8	500	6.5	8.6	1.1	0.73	180	MLG0402P3N3CT000
3.3	± 0.3 nH	8	500	6.5	8.6	1.1	0.73	180	MLG0402P3N3ST000
3.4	± 0.1 nH	8	500	6.0	8.6	1.1	0.74	180	MLG0402P3N4BT000
3.4	± 0.2 nH	8	500	6.0	8.6	1.1	0.74	180	MLG0402P3N4CT000
3.4	± 0.3 nH	8	500	6.0	8.6	1.1	0.74	180	MLG0402P3N4ST000
3.5	± 0.1 nH	8	500	6.0	8.3	1.1	0.75	180	MLG0402P3N5BT000
3.5	± 0.2 nH	8	500	6.0	8.3	1.1	0.75	180	MLG0402P3N5CT000
3.5	± 0.3 nH	8	500	6.0	8.3	1.1	0.75	180	MLG0402P3N5ST000
3.6	± 0.1 nH	8	500	6.0	8.3	1.1	0.73	180	MLG0402P3N6BT000
3.6	± 0.2 nH	8	500	6.0	8.3	1.1	0.73	180	MLG0402P3N6CT000
3.6	± 0.3 nH	8	500	6.0	8.3	1.1	0.73	180	MLG0402P3N6ST000
3.7	± 0.1 nH	8	500	6.0	8.0	1.1	0.70	180	MLG0402P3N7BT000
3.7	± 0.2 nH	8	500	6.0	8.0	1.1	0.70	180	MLG0402P3N7CT000
3.7	± 0.3 nH	8	500	6.0	8.0	1.1	0.70	180	MLG0402P3N7ST000
3.8	± 0.1 nH	8	500	6.0	7.8	1.2	0.77	180	MLG0402P3N8BT000
3.8	± 0.2 nH	8	500	6.0	7.8	1.2	0.77	180	MLG0402P3N8CT000
3.8	± 0.3 nH	8	500	6.0	7.8	1.2	0.77	180	MLG0402P3N8ST000
3.9	± 0.1 nH	8	500	6.0	7.6	1.2	0.71	180	MLG0402P3N9BT000
3.9	± 0.2 nH	8	500	6.0	7.6	1.2	0.71	180	MLG0402P3N9CT000
3.9	± 0.3 nH	8	500	6.0	7.6	1.2	0.71	180	MLG0402P3N9ST000
4.0	± 0.1 nH	8	500	6.0	7.5	1.2	0.73	180	MLG0402P4N0BT000
4.0	± 0.2 nH	8	500	6.0	7.5	1.2	0.73	180	MLG0402P4N0CT000
4.0	± 0.3 nH	8	500	6.0	7.5	1.2	0.73	180	MLG0402P4N0ST000
4.1	± 0.1 nH	8	500	6.0	7.9	1.2	0.75	180	MLG0402P4N1BT000
4.1	± 0.2 nH	8	500	6.0	7.9	1.2	0.75	180	MLG0402P4N1CT000
4.1	± 0.3 nH	8	500	6.0	7.9	1.2	0.75	180	MLG0402P4N1ST000
4.2	± 0.1 nH	8	500	6.0	7.9	1.2	0.77	180	MLG0402P4N2BT000
4.2	± 0.2 nH	8	500	6.0	7.9	1.2	0.77	180	MLG0402P4N2CT000
4.2	± 0.3 nH	8	500	6.0	7.9	1.2	0.77	180	MLG0402P4N2ST000
4.3	± 0.3 nH	8	500	6.0	8.0	1.2	0.80	180	MLG0402P4N3ST000
4.3	$\pm 3\%$	8	500	6.0	8.0	1.2	0.80	180	MLG0402P4N3HT000
4.3	$\pm 5\%$	8	500	6.0	8.0	1.2	0.80	180	MLG0402P4N3JT000
4.7	± 0.3 nH	8	500	5.0	7.2	1.3	0.88	160	MLG0402P4N7ST000
4.7	$\pm 3\%$	8	500	5.0	7.2	1.3	0.88	160	MLG0402P4N7HT000
4.7	$\pm 5\%$	8	500	5.0	7.2	1.3	0.88	160	MLG0402P4N7JT000
5.1	± 0.3 nH	8	500	5.0	7.0	1.4	0.90	160	MLG0402P5N1ST000
5.1	$\pm 3\%$	8	500	5.0	7.0	1.4	0.90	160	MLG0402P5N1HT000
5.1	$\pm 5\%$	8	500	5.0	7.0	1.4	0.90	160	MLG0402P5N1JT000
5.6	± 0.3 nH	8	500	5.0	6.8	1.5	1.02	140	MLG0402P5N6ST000
5.6	$\pm 3\%$	8	500	5.0	6.8	1.5	1.02	140	MLG0402P5N6HT000
5.6	$\pm 5\%$	8	500	5.0	6.8	1.5	1.02	140	MLG0402P5N6JT000
6.2	$\pm 3\%$	8	500	4.5	6.5	1.5	1.04	140	MLG0402P6N2HT000
6.2	$\pm 5\%$	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

CHARACTERISTICS SPECIFICATION TABLE

L (nH)	Q 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	$\pm 3\%$	8	500	4.3	5.8	1.6	1.12	140	MLG0402P6N8HT000
6.8	$\pm 5\%$	8	500	4.3	5.8	1.6	1.12	140	MLG0402P6N8JT000
7.5	$\pm 3\%$	8	500	4.2	5.7	1.7	1.13	140	MLG0402P7N5HT000
7.5	$\pm 5\%$	8	500	4.2	5.7	1.7	1.13	140	MLG0402P7N5JT000
8.2	$\pm 3\%$	8	500	4.0	5.5	1.8	1.16	140	MLG0402P8N2HT000
8.2	$\pm 5\%$	8	500	4.0	5.5	1.8	1.16	140	MLG0402P8N2JT000
9.1	$\pm 3\%$	8	500	4.0	5.5	1.8	1.20	140	MLG0402P9N1HT000
9.1	$\pm 5\%$	8	500	4.0	5.5	1.8	1.20	140	MLG0402P9N1JT000
10.0	$\pm 3\%$	8	500	3.6	4.7	2.1	1.45	140	MLG0402P10NHT000
10.0	$\pm 5\%$	8	500	3.6	4.7	2.1	1.45	140	MLG0402P10NJT000
11.0	$\pm 3\%$	8	500	3.5	4.6	2.2	1.51	140	MLG0402P11NHT000
11.0	$\pm 5\%$	8	500	3.5	4.6	2.2	1.51	140	MLG0402P11NJT000
12.0	$\pm 3\%$	8	500	3.4	4.5	2.4	1.64	140	MLG0402P12NHT000
12.0	$\pm 5\%$	8	500	3.4	4.5	2.4	1.64	140	MLG0402P12NJT000
13.0	$\pm 3\%$	8	500	3.2	4.3	2.5	1.71	140	MLG0402P13NHT000
13.0	$\pm 5\%$	8	500	3.2	4.3	2.5	1.71	140	MLG0402P13NJT000
15.0	$\pm 3\%$	8	500	3.0	3.9	2.6	1.77	140	MLG0402P15NHT000
15.0	$\pm 5\%$	8	500	3.0	3.9	2.6	1.77	140	MLG0402P15NJT000
16.0	$\pm 3\%$	7	500	2.4	3.4	2.7	1.79	140	MLG0402P16NHT000
16.0	$\pm 5\%$	7	500	2.4	3.4	2.7	1.79	140	MLG0402P16NJT000
18.0	$\pm 3\%$	7	500	2.3	3.2	2.8	1.94	140	MLG0402P18NHT000
18.0	$\pm 5\%$	7	500	2.3	3.2	2.8	1.94	140	MLG0402P18NJT000
20.0	$\pm 3\%$	7	500	2.2	2.8	3.0	2.09	130	MLG0402P20NHT000
20.0	$\pm 5\%$	7	500	2.2	2.8	3.0	2.09	130	MLG0402P20NJT000
22.0	$\pm 3\%$	7	500	2.0	2.7	3.2	2.18	130	MLG0402P22NHT000
22.0	$\pm 5\%$	7	500	2.0	2.7	3.2	2.18	130	MLG0402P22NJT000
24.0	$\pm 3\%$	7	500	2.0	2.6	3.2	2.30	120	MLG0402P24NHT000
24.0	$\pm 5\%$	7	500	2.0	2.6	3.2	2.30	120	MLG0402P24NJT000
27.0	$\pm 3\%$	7	500	1.8	2.3	3.5	2.44	120	MLG0402P27NHT000
27.0	$\pm 5\%$	7	500	1.8	2.3	3.5	2.44	120	MLG0402P27NJT000
30.0	$\pm 3\%$	7	500	1.7	2.2	3.6	2.56	120	MLG0402P30NHT000
30.0	$\pm 5\%$	7	500	1.7	2.2	3.6	2.56	120	MLG0402P30NJT000
33.0	$\pm 3\%$	6	300	1.4	1.9	3.8	2.71	120	MLG0402P33NHT000
33.0	$\pm 5\%$	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

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

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

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

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

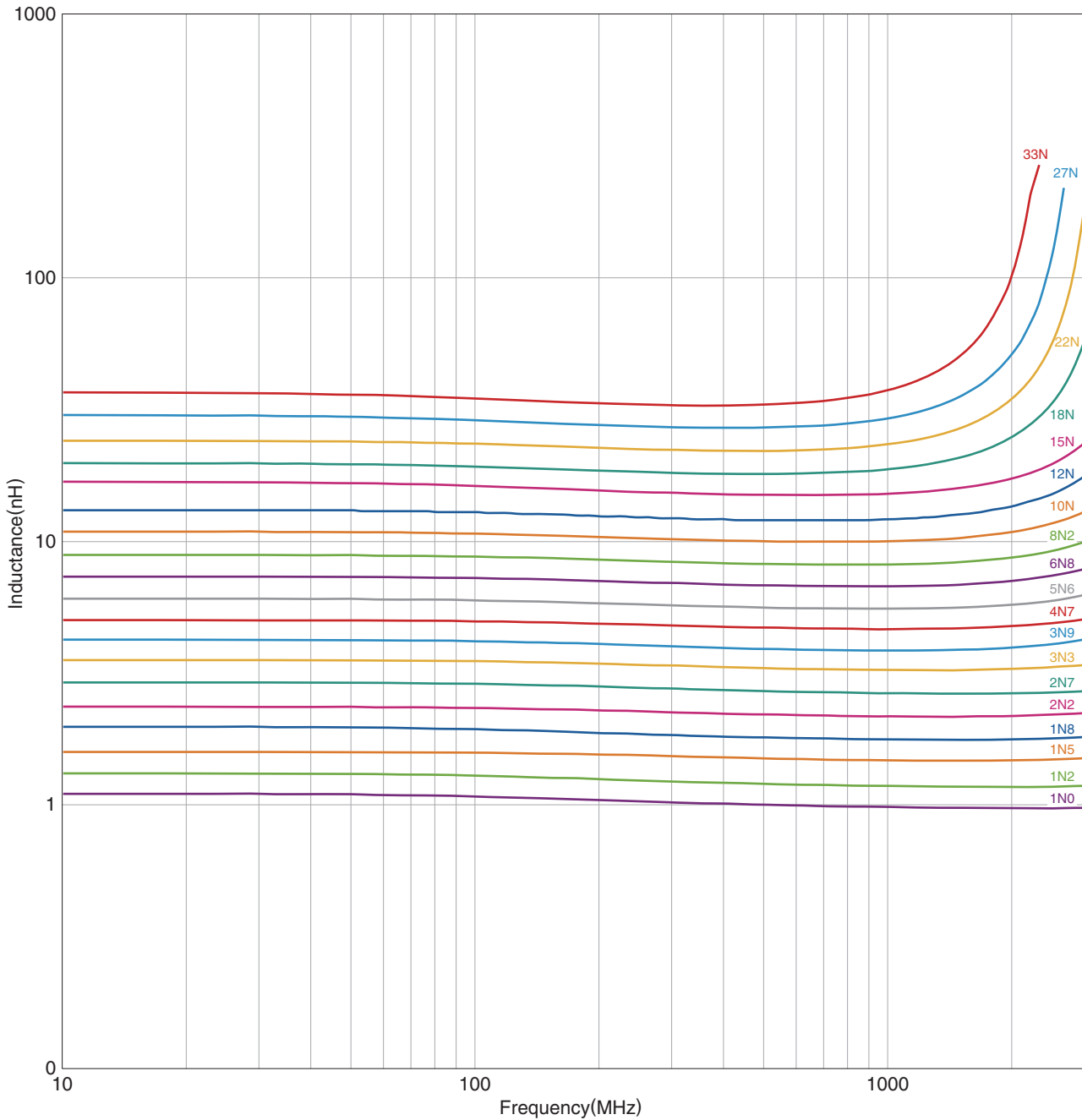
Measurement equipment

Product No.	Manufacturer
4291B+16196D	Keysight Technologies

* Equivalent measurement equipment may be used.

MLG0402P type

L FREQUENCY CHARACTERISTICS (EXAMPLE)



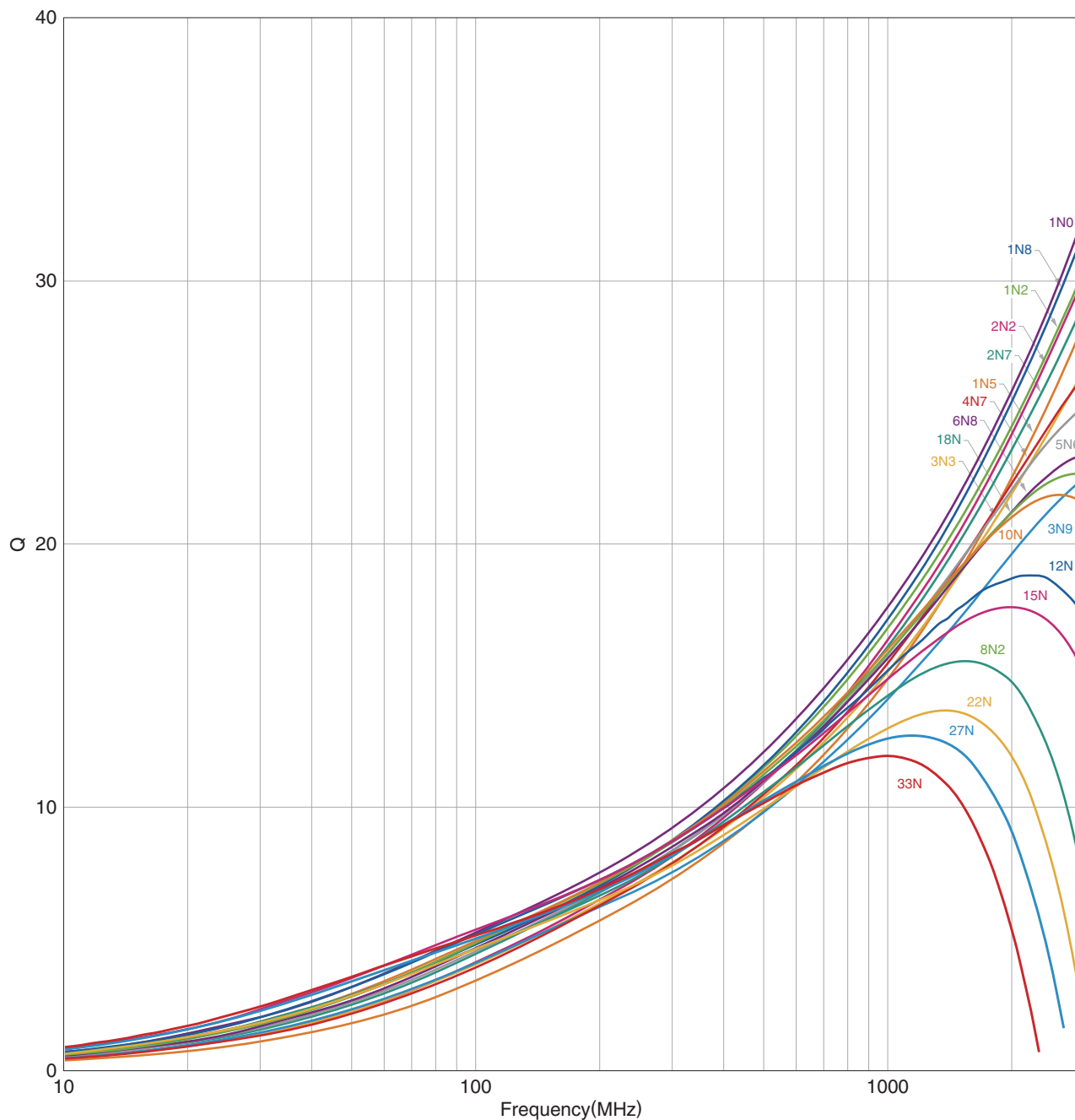
Measurement equipment

Product No.	Manufacturer
E4991A+16196D	Keysight Technologies

* Equivalent measurement equipment may be used.

MLG0402P type

Q FREQUENCY CHARACTERISTICS (EXAMPLE)



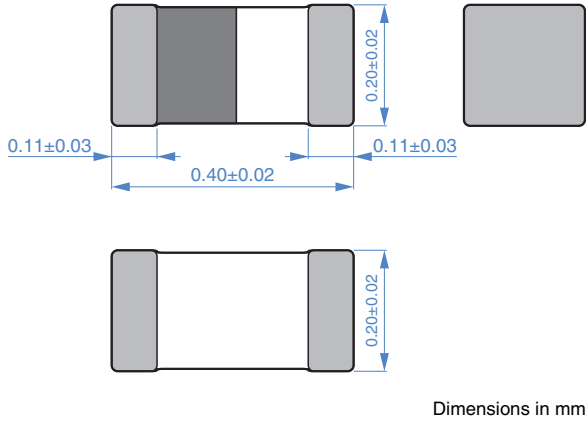
Measurement equipment

Product No.	Manufacturer
E4991A+16196D	Keysight Technologies

* Equivalent measurement equipment may be used.

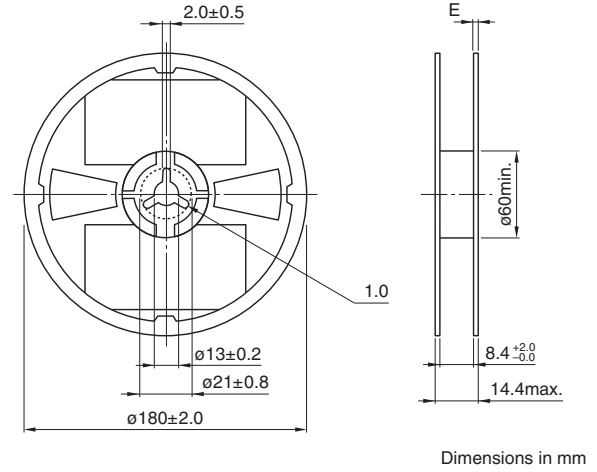
MLG0402P type

SHAPE & DIMENSIONS

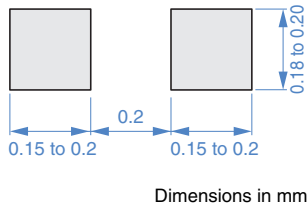


PACKAGING STYLE

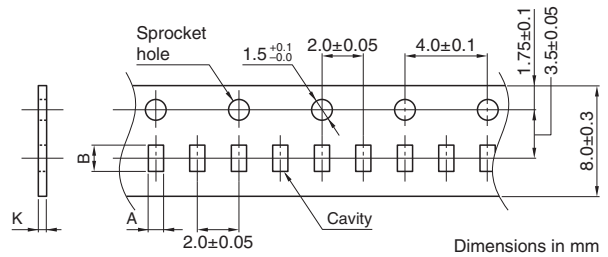
REEL DIMENSIONS



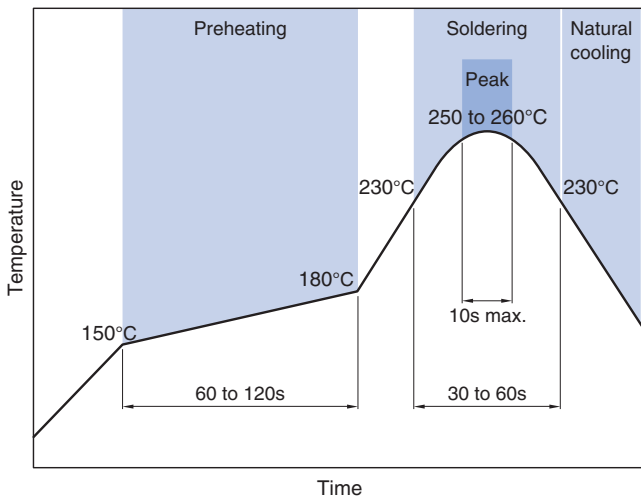
RECOMMENDED LAND PATTERN



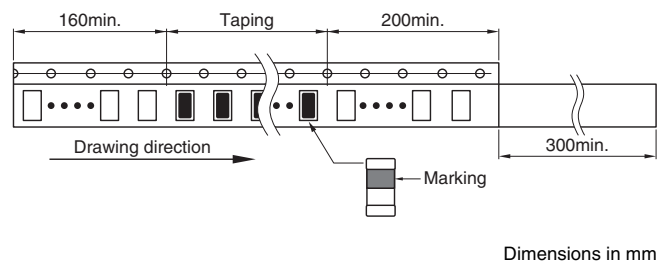
TAPE DIMENSIONS



RECOMMENDED REFLOW PROFILE



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



PACKAGE QUANTITY

Package quantity	20000 pcs/reel
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TEMPERATURE RANGE, INDIVIDUAL WEIGHT

Operating temperature range	Storage temperature range*	Individual weight
-55 to +125 °C	-55 to +125 °C	0.07 mg

* The storage temperature range is for after the assembly.

- REMINDERS FOR USING THESE PRODUCTS -

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

REMINDERS

1. Introduction

This product is a multilayer inductor designed for high-frequency applications, with a lineup tailored to various purposes. By following proper handling and usage conditions, you can maximize product performance and prevent failures or safety issues.

2. General Precautions

- Do not use the product beyond its rated current. Overcurrent may cause degradation of performance or damage.
- Use the product within the operating temperature range specified in the product datasheet.
Failure to do so may lead to performance degradation or solder deterioration.
- Do not use or store in locations where there are conditions such as gas corrosion (salt, acid, alkali, etc.).
- Please use a wrist strap to discharge static electricity from the human body to the ground.
- Do not expose the products to magnets or magnetic fields.
- Do not use the product beyond the specifications described in the delivery specifications or product datasheet.

3. Precautions for Mounting and Implementation

- Applying excessive external impact to the product may cause cracks or chipping.
- 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.
- For products with direction marks, the orientation of the mark may affect the set characteristics. Please verify the performance of the set in advance.
- Use the reflow soldering conditions specified in the product datasheet.
- Be sure to preheat the product before soldering.
The temperature difference between the solder and the product during preheating should be within 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.
Some products do not support rework by manual soldering.
- Land pattern design affects mountability. If you change it from the recommended design, please verify it before use.
- Thermal and mechanical stress from the board can be affected by the type and amount of solder, potentially degrading performance.
Solder Type: Use lead-free solder SAC305.
Solder Amount: Solder with an appropriate fillet shape to avoid excessive solder.
- The original characteristics may not be achieved due to the influence of other components mounted around the product.
In such cases, please consider changing the layout or combining inductors with different winding structures.
- The storage period is within 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.
- Avoid drops or strong impacts during transport, and avoid high temperatures caused by direct sunlight. Excessive heat can degrade the quality of packaging materials such as boxes, reels, and tapes.

4. Disclaimer

These precautions are based on general usage conditions.

For detailed specifications and conditions for each product, please refer to the product datasheet and delivery specifications.

Our company assumes no responsibility for any direct or indirect damage resulting from use based on these precautions.

The contents are subject to change without notice due to improvements or other reasons.

- SAFETY REMINDERS -

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

REMINDERS

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 | (8) Public information-processing equipment |
| (2) Transportation equipment (cars, electric trains, ships, etc.) | (9) Military equipment |
| (3) Medical equipment | (10) Electric heating apparatus, burning equipment |
| (4) Power-generation control equipment | (11) Disaster prevention/crime prevention equipment |
| (5) Atomic energy-related equipment | (12) Safety equipment |
| (6) Seabed equipment | (13) Other applications that are not considered general-purpose applications |
| (7) Transportation control equipment | |

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.