



THE DATASHEET OF MLG0603P33NJT000

Inductors for high frequency circuits
Multilayer ceramic
MLG-P series



MLG0603P type



FEATURES

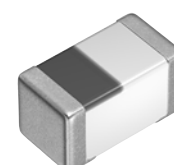
- High Q type inductor for high-frequency circuits.
- Inductance range: from 0.6 to 120nH.
- 0.1n step inductance lineup.
- Compared with existing products, the size was greatly reduced, making it optimal for fine-pitch circuits.
- Optimal configuration that greatly improves the Q to 800MHz or higher.
- 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 (PAs, VCOs, FEMs , etc.), Bluetooth, W-LAN, UWB, tuners and other high frequency circuits for the mobile communication industry
- Application guides: [Smart phones/tablets](#)

PART NUMBER CONSTRUCTION

MLG	0603	P	0N6	B	T	000
Series name	L×W×H dimensions 0.6×0.3×0.3 mm	Characteristics	Inductance (nH)	Inductance tolerance	Packaging style	Internal code



MLG0603P 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.		
0.6	$\pm 0.1\text{nH}$	—	500	10.0	20.0	0.06	0.01	1000	MLG0603P0N6BT000
0.6	$\pm 0.2\text{nH}$	—	500	10.0	20.0	0.06	0.01	1000	MLG0603P0N6CT000
0.7	$\pm 0.1\text{nH}$	—	500	10.0	20.0	0.06	0.01	1000	MLG0603P0N7BT000
0.7	$\pm 0.2\text{nH}$	—	500	10.0	20.0	0.06	0.01	1000	MLG0603P0N7CT000
0.8	$\pm 0.1\text{nH}$	—	500	10.0	20.0	0.06	0.02	1000	MLG0603P0N8BT000
0.8	$\pm 0.2\text{nH}$	—	500	10.0	20.0	0.06	0.02	1000	MLG0603P0N8CT000
0.9	$\pm 0.1\text{nH}$	—	500	10.0	20.0	0.06	0.02	1000	MLG0603P0N9BT000
0.9	$\pm 0.2\text{nH}$	—	500	10.0	20.0	0.06	0.02	1000	MLG0603P0N9CT000
1.0	$\pm 0.1\text{nH}$	14	500	10.0	20.0	0.07	0.02	1000	MLG0603P1N0BT000
1.0	$\pm 0.2\text{nH}$	14	500	10.0	20.0	0.07	0.02	1000	MLG0603P1N0CT000
1.0	$\pm 0.3\text{nH}$	14	500	10.0	20.0	0.07	0.02	1000	MLG0603P1N0ST000
1.1	$\pm 0.1\text{nH}$	14	500	10.0	19.9	0.07	0.03	1000	MLG0603P1N1BT000
1.1	$\pm 0.2\text{nH}$	14	500	10.0	19.9	0.07	0.03	1000	MLG0603P1N1CT000
1.1	$\pm 0.3\text{nH}$	14	500	10.0	19.9	0.07	0.03	1000	MLG0603P1N1ST000
1.2	$\pm 0.1\text{nH}$	14	500	10.0	16.0	0.08	0.04	800	MLG0603P1N2BT000
1.2	$\pm 0.2\text{nH}$	14	500	10.0	16.0	0.08	0.04	800	MLG0603P1N2CT000
1.2	$\pm 0.3\text{nH}$	14	500	10.0	16.0	0.08	0.04	800	MLG0603P1N2ST000
1.3	$\pm 0.1\text{nH}$	14	500	10.0	13.9	0.08	0.03	800	MLG0603P1N3BT000
1.3	$\pm 0.2\text{nH}$	14	500	10.0	13.9	0.08	0.03	800	MLG0603P1N3CT000
1.3	$\pm 0.3\text{nH}$	14	500	10.0	13.9	0.08	0.03	800	MLG0603P1N3ST000
1.4	$\pm 0.1\text{nH}$	14	500	10.0	11.7	0.09	0.04	800	MLG0603P1N4BT000
1.4	$\pm 0.2\text{nH}$	14	500	10.0	11.7	0.09	0.04	800	MLG0603P1N4CT000
1.4	$\pm 0.3\text{nH}$	14	500	10.0	11.7	0.09	0.04	800	MLG0603P1N4ST000
1.5	$\pm 0.1\text{nH}$	14	500	10.0	14.9	0.10	0.03	800	MLG0603P1N5BT000
1.5	$\pm 0.2\text{nH}$	14	500	10.0	14.9	0.10	0.03	800	MLG0603P1N5CT000
1.5	$\pm 0.3\text{nH}$	14	500	10.0	14.9	0.10	0.03	800	MLG0603P1N5ST000
1.6	$\pm 0.1\text{nH}$	14	500	10.0	13.4	0.10	0.03	700	MLG0603P1N6BT000
1.6	$\pm 0.2\text{nH}$	14	500	10.0	13.4	0.10	0.03	700	MLG0603P1N6CT000
1.6	$\pm 0.3\text{nH}$	14	500	10.0	13.4	0.10	0.03	700	MLG0603P1N6ST000
1.7	$\pm 0.1\text{nH}$	14	500	10.0	12.8	0.10	0.02	700	MLG0603P1N7BT000
1.7	$\pm 0.2\text{nH}$	14	500	10.0	12.8	0.10	0.02	700	MLG0603P1N7CT000
1.7	$\pm 0.3\text{nH}$	14	500	10.0	12.8	0.10	0.02	700	MLG0603P1N7ST000
1.8	$\pm 0.1\text{nH}$	14	500	9.0	10.7	0.10	0.03	700	MLG0603P1N8BT000
1.8	$\pm 0.2\text{nH}$	14	500	9.0	10.7	0.10	0.03	700	MLG0603P1N8CT000
1.8	$\pm 0.3\text{nH}$	14	500	9.0	10.7	0.10	0.03	700	MLG0603P1N8ST000
1.9	$\pm 0.1\text{nH}$	14	500	9.0	10.9	0.10	0.04	600	MLG0603P1N9BT000
1.9	$\pm 0.2\text{nH}$	14	500	9.0	10.9	0.10	0.04	600	MLG0603P1N9CT000
1.9	$\pm 0.3\text{nH}$	14	500	9.0	10.9	0.10	0.04	600	MLG0603P1N9ST000
2.0	$\pm 0.1\text{nH}$	14	500	8.5	10.1	0.10	0.03	600	MLG0603P2N0BT000
2.0	$\pm 0.2\text{nH}$	14	500	8.5	10.1	0.10	0.03	600	MLG0603P2N0CT000
2.0	$\pm 0.3\text{nH}$	14	500	8.5	10.1	0.10	0.03	600	MLG0603P2N0ST000
2.1	$\pm 0.1\text{nH}$	14	500	8.0	9.8	0.10	0.05	600	MLG0603P2N1BT000
2.1	$\pm 0.2\text{nH}$	14	500	8.0	9.8	0.10	0.05	600	MLG0603P2N1CT000
2.1	$\pm 0.3\text{nH}$	14	500	8.0	9.8	0.10	0.05	600	MLG0603P2N1ST000

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

• Short bar residual inductance $\approx 0.43\text{nH}$

Measurement equipment

Measurement item	Product No.	Manufacturer
L, Q	4291B+16197A	Keysight Technologies
Self-resonant frequency	8720C	Keysight Technologies
DC resistance	Type-7561	Yokogawa

* Equivalent measurement equipment may be used.

MLG0603P 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.		
2.2	±0.1nH	14	500	7.5	9.0	0.10	0.07	600	MLG0603P2N2BT000
2.2	±0.2nH	14	500	7.5	9.0	0.10	0.07	600	MLG0603P2N2CT000
2.2	±0.3nH	14	500	7.5	9.0	0.10	0.07	600	MLG0603P2N2ST000
2.3	±0.1nH	14	500	7.5	8.4	0.20	0.07	600	MLG0603P2N3BT000
2.3	±0.2nH	14	500	7.5	8.4	0.20	0.07	600	MLG0603P2N3CT000
2.3	±0.3nH	14	500	7.5	8.4	0.20	0.07	600	MLG0603P2N3ST000
2.4	±0.1nH	14	500	7.5	10.9	0.20	0.12	500	MLG0603P2N4BT000
2.4	±0.2nH	14	500	7.5	10.9	0.20	0.12	500	MLG0603P2N4CT000
2.4	±0.3nH	14	500	7.5	10.9	0.20	0.12	500	MLG0603P2N4ST000
2.5	±0.1nH	14	500	7.5	9.9	0.20	0.09	500	MLG0603P2N5BT000
2.5	±0.2nH	14	500	7.5	9.9	0.20	0.09	500	MLG0603P2N5CT000
2.5	±0.3nH	14	500	7.5	9.9	0.20	0.09	500	MLG0603P2N5ST000
2.6	±0.1nH	14	500	7.5	10.1	0.20	0.14	500	MLG0603P2N6BT000
2.6	±0.2nH	14	500	7.5	10.1	0.20	0.14	500	MLG0603P2N6CT000
2.6	±0.3nH	14	500	7.5	10.1	0.20	0.14	500	MLG0603P2N6ST000
2.7	±0.1nH	14	500	7.5	10.0	0.20	0.14	500	MLG0603P2N7BT000
2.7	±0.2nH	14	500	7.5	10.0	0.20	0.14	500	MLG0603P2N7CT000
2.7	±0.3nH	14	500	7.5	10.0	0.20	0.14	500	MLG0603P2N7ST000
2.8	±0.1nH	14	500	7.5	9.9	0.20	0.10	500	MLG0603P2N8BT000
2.8	±0.2nH	14	500	7.5	9.9	0.20	0.10	500	MLG0603P2N8CT000
2.8	±0.3nH	14	500	7.5	9.9	0.20	0.10	500	MLG0603P2N8ST000
2.9	±0.1nH	14	500	7.5	9.2	0.20	0.10	500	MLG0603P2N9BT000
2.9	±0.2nH	14	500	7.5	9.2	0.20	0.10	500	MLG0603P2N9CT000
2.9	±0.3nH	14	500	7.5	9.2	0.20	0.10	500	MLG0603P2N9ST000
3.0	±0.1nH	14	500	7.5	9.1	0.20	0.14	450	MLG0603P3N0BT000
3.0	±0.2nH	14	500	7.5	9.1	0.20	0.14	450	MLG0603P3N0CT000
3.0	±0.3nH	14	500	7.5	9.1	0.20	0.14	450	MLG0603P3N0ST000
3.1	±0.1nH	14	500	7.5	8.8	0.20	0.10	450	MLG0603P3N1BT000
3.1	±0.2nH	14	500	7.5	8.8	0.20	0.10	450	MLG0603P3N1CT000
3.1	±0.3nH	14	500	7.5	8.8	0.20	0.10	450	MLG0603P3N1ST000
3.2	±0.1nH	14	500	7.5	8.4	0.20	0.14	450	MLG0603P3N2BT000
3.2	±0.2nH	14	500	7.5	8.4	0.20	0.14	450	MLG0603P3N2CT000
3.2	±0.3nH	14	500	7.5	8.4	0.20	0.14	450	MLG0603P3N2ST000
3.3	±0.1nH	14	500	7.5	8.4	0.20	0.13	450	MLG0603P3N3BT000
3.3	±0.2nH	14	500	7.5	8.4	0.20	0.13	450	MLG0603P3N3CT000
3.3	±0.3nH	14	500	7.5	8.4	0.20	0.13	450	MLG0603P3N3ST000
3.4	±0.1nH	14	500	7.0	8.1	0.20	0.13	450	MLG0603P3N4BT000
3.4	±0.2nH	14	500	7.0	8.1	0.20	0.13	450	MLG0603P3N4CT000
3.4	±0.3nH	14	500	7.0	8.1	0.20	0.13	450	MLG0603P3N4ST000
3.5	±0.1nH	14	500	6.5	8.0	0.20	0.12	450	MLG0603P3N5BT000
3.5	±0.2nH	14	500	6.5	8.0	0.20	0.12	450	MLG0603P3N5CT000
3.5	±0.3nH	14	500	6.5	8.0	0.20	0.12	450	MLG0603P3N5ST000
3.6	±0.1nH	14	500	6.5	7.7	0.20	0.10	400	MLG0603P3N6BT000
3.6	±0.2nH	14	500	6.5	7.7	0.20	0.10	400	MLG0603P3N6CT000
3.6	±0.3nH	14	500	6.5	7.7	0.20	0.10	400	MLG0603P3N6ST000

* Please contact us for information on inductance tolerance, G (±2%).

• Short bar residual inductance =0.43nH

Measurement equipment

Measurement item	Product No.	Manufacturer
L, Q	4291B+16197A	Keysight Technologies
Self-resonant frequency	8720C	Keysight Technologies
DC resistance	Type-7561	Yokogawa

* Equivalent measurement equipment may be used.

MLG0603P 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.		
3.7	±0.1nH	14	500	6.5	7.4	0.20	0.14	400	MLG0603P3N7BT000
3.7	±0.2nH	14	500	6.5	7.4	0.20	0.14	400	MLG0603P3N7CT000
3.7	±0.3nH	14	500	6.5	7.4	0.20	0.14	400	MLG0603P3N7ST000
3.8	±0.1nH	14	500	5.8	7.0	0.30	0.24	400	MLG0603P3N8BT000
3.8	±0.2nH	14	500	5.8	7.0	0.30	0.24	400	MLG0603P3N8CT000
3.8	±0.3nH	14	500	5.8	7.0	0.30	0.24	400	MLG0603P3N8ST000
3.9	±0.1nH	14	500	5.8	7.1	0.30	0.22	400	MLG0603P3N9BT000
3.9	±0.2nH	14	500	5.8	7.1	0.30	0.22	400	MLG0603P3N9CT000
3.9	±0.3nH	14	500	5.8	7.1	0.30	0.22	400	MLG0603P3N9ST000
4.0	±0.1nH	14	500	5.8	6.7	0.40	0.21	350	MLG0603P4N0BT000
4.0	±0.2nH	14	500	5.8	6.7	0.40	0.21	350	MLG0603P4N0CT000
4.0	±0.3nH	14	500	5.8	6.7	0.40	0.21	350	MLG0603P4N0ST000
4.1	±0.1nH	14	500	5.8	6.7	0.40	0.29	350	MLG0603P4N1BT000
4.1	±0.2nH	14	500	5.8	6.7	0.40	0.29	350	MLG0603P4N1CT000
4.1	±0.3nH	14	500	5.8	6.7	0.40	0.29	350	MLG0603P4N1ST000
4.2	±0.1nH	14	500	5.8	6.6	0.40	0.24	350	MLG0603P4N2BT000
4.2	±0.2nH	14	500	5.8	6.6	0.40	0.24	350	MLG0603P4N2CT000
4.2	±0.3nH	14	500	5.8	6.6	0.40	0.24	350	MLG0603P4N2ST000
4.3	±0.3nH	14	500	5.8	6.7	0.40	0.24	350	MLG0603P4N3ST000
4.3	±3%	14	500	5.8	6.7	0.40	0.24	350	MLG0603P4N3HT000
4.3	±5%	14	500	5.8	6.7	0.40	0.24	350	MLG0603P4N3JT000
4.7	±0.3nH	14	500	5.5	6.9	0.40	0.16	350	MLG0603P4N7ST000
4.7	±3%	14	500	5.5	6.9	0.40	0.16	350	MLG0603P4N7HT000
4.7	±5%	14	500	5.5	6.9	0.40	0.16	350	MLG0603P4N7JT000
5.1	±0.3nH	14	500	5.5	6.6	0.40	0.30	350	MLG0603P5N1ST000
5.1	±3%	14	500	5.5	6.6	0.40	0.30	350	MLG0603P5N1HT000
5.1	±5%	14	500	5.5	6.6	0.40	0.30	350	MLG0603P5N1JT000
5.6	±0.3nH	14	500	4.0	5.3	0.40	0.32	350	MLG0603P5N6ST000
5.6	±3%	14	500	4.0	5.3	0.40	0.32	350	MLG0603P5N6HT000
5.6	±5%	14	500	4.0	5.3	0.40	0.32	350	MLG0603P5N6JT000
6.2	±0.3nH	14	500	4.0	6.3	0.70	0.59	300	MLG0603P6N2ST000
6.2	±3%	14	500	4.0	6.3	0.70	0.59	300	MLG0603P6N2HT000
6.2	±5%	14	500	4.0	6.3	0.70	0.59	300	MLG0603P6N2JT000
6.8	±3%	14	500	4.0	6.1	0.75	0.62	300	MLG0603P6N8HT000
6.8	±5%	14	500	4.0	6.1	0.75	0.62	300	MLG0603P6N8JT000
7.5	±3%	14	500	4.0	5.4	0.80	0.70	300	MLG0603P7N5HT000
7.5	±5%	14	500	4.0	5.4	0.80	0.70	300	MLG0603P7N5JT000
8.2	±3%	14	500	4.0	5.2	0.85	0.71	250	MLG0603P8N2HT000
8.2	±5%	14	500	4.0	5.2	0.85	0.71	250	MLG0603P8N2JT000
9.1	±3%	14	500	4.0	5.0	0.90	0.76	250	MLG0603P9N1HT000
9.1	±5%	14	500	4.0	5.0	0.90	0.76	250	MLG0603P9N1JT000
10.0	±3%	14	500	4.0	4.7	0.95	0.85	250	MLG0603P10NHT000
10.0	±5%	14	500	4.0	4.7	0.95	0.85	250	MLG0603P10NJT000
11.0	±3%	14	500	3.5	4.5	1.00	0.64	250	MLG0603P11NHT000
11.0	±5%	14	500	3.5	4.5	1.00	0.64	250	MLG0603P11NJT000

* Please contact us for information on inductance tolerance, G (±2%).

· Short bar residual inductance =0.43nH

Measurement equipment

Measurement item	Product No.	Manufacturer
L, Q	4291B+16197A	Keysight Technologies
Self-resonant frequency	8720C	Keysight Technologies
DC resistance	Type-7561	Yokogawa

* Equivalent measurement equipment may be used.

MLG0603P 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.		
12.0	±3%	14	500	3.5	4.3	1.10	0.82	250	MLG0603P12NHT000
12.0	±5%	14	500	3.5	4.3	1.10	0.82	250	MLG0603P12NJT000
13.0	±3%	14	500	3.2	4.2	1.10	0.87	250	MLG0603P13NHT000
13.0	±5%	14	500	3.2	4.2	1.10	0.87	250	MLG0603P13NJT000
15.0	±3%	14	500	3.2	3.7	1.20	0.94	250	MLG0603P15NHT000
15.0	±5%	14	500	3.2	3.7	1.20	0.94	250	MLG0603P15NJT000
16.0	±3%	14	500	3.0	3.6	1.20	1.00	200	MLG0603P16NHT000
16.0	±5%	14	500	3.0	3.6	1.20	1.00	200	MLG0603P16NJT000
18.0	±3%	14	500	3.0	3.5	1.40	1.04	200	MLG0603P18NHT000
18.0	±5%	14	500	3.0	3.5	1.40	1.04	200	MLG0603P18NJT000
20.0	±3%	14	500	2.2	3.3	1.90	1.33	150	MLG0603P20NHT000
20.0	±5%	14	500	2.2	3.3	1.90	1.33	150	MLG0603P20NJT000
22.0	±3%	14	500	2.2	2.9	1.90	1.31	150	MLG0603P22NHT000
22.0	±5%	14	500	2.2	2.9	1.90	1.31	150	MLG0603P22NJT000
24.0	±3%	14	500	2.2	2.9	2.10	1.17	140	MLG0603P24NHT000
24.0	±5%	14	500	2.2	2.9	2.10	1.17	140	MLG0603P24NJT000
27.0	±3%	14	500	2.2	2.7	2.10	1.45	140	MLG0603P27NHT000
27.0	±5%	14	500	2.2	2.7	2.10	1.45	140	MLG0603P27NJT000
30.0	±3%	10	500	1.8	2.3	2.20	1.37	130	MLG0603P30NHT000
30.0	±5%	10	500	1.8	2.3	2.20	1.37	130	MLG0603P30NJT000
33.0	±3%	10	300	1.8	2.4	2.20	1.55	130	MLG0603P33NHT000
33.0	±5%	10	300	1.8	2.4	2.20	1.55	130	MLG0603P33NJT000
36.0	±3%	10	300	1.8	2.2	2.40	1.49	120	MLG0603P36NHT000
36.0	±5%	10	300	1.8	2.2	2.40	1.49	120	MLG0603P36NJT000
39.0	±3%	10	300	1.8	2.2	2.40	1.72	120	MLG0603P39NHT000
39.0	±5%	10	300	1.8	2.2	2.40	1.72	120	MLG0603P39NJT000
43.0	±3%	10	300	1.6	2.0	2.90	1.61	110	MLG0603P43NHT000
43.0	±5%	10	300	1.6	2.0	2.90	1.61	110	MLG0603P43NJT000
47.0	±3%	10	300	1.6	2.0	2.90	2.18	110	MLG0603P47NHT000
47.0	±5%	10	300	1.6	2.0	2.90	2.18	110	MLG0603P47NJT000
51.0	±3%	10	300	1.4	1.9	3.50	1.87	100	MLG0603P51NHT000
51.0	±5%	10	300	1.4	1.9	3.50	1.87	100	MLG0603P51NJT000
56.0	±3%	10	300	1.4	1.8	3.50	2.35	100	MLG0603P56NHT000
56.0	±5%	10	300	1.4	1.8	3.50	2.35	100	MLG0603P56NJT000
62.0	±3%	10	300	1.2	1.6	3.50	2.12	100	MLG0603P62NHT000
62.0	±5%	10	300	1.2	1.6	3.50	2.12	100	MLG0603P62NJT000
68.0	±3%	9	300	1.2	1.6	3.50	2.69	100	MLG0603P68NHT000
68.0	±5%	9	300	1.2	1.6	3.50	2.69	100	MLG0603P68NJT000
75.0	±3%	9	300	1.0	1.5	4.00	2.59	80	MLG0603P75NHT000
75.0	±5%	9	300	1.0	1.5	4.00	2.59	80	MLG0603P75NJT000
82.0	±3%	9	300	1.0	1.5	4.00	2.71	80	MLG0603P82NHT000
82.0	±5%	9	300	1.0	1.5	4.00	2.71	80	MLG0603P82NJT000
91.0	±3%	9	300	0.9	1.3	4.50	2.92	80	MLG0603P91NHT000
91.0	±5%	9	300	0.9	1.3	4.50	2.92	80	MLG0603P91NJT000

*Please contact us for information on inductance tolerance, G (±2%).

· Short bar residual inductance =0.43nH

Measurement equipment

Measurement item	Product No.	Manufacturer
L, Q	4291B+16197A	Keysight Technologies
Self-resonant frequency	8720C	Keysight Technologies
DC resistance	Type-7561	Yokogawa

* Equivalent measurement equipment may be used.

MLG0603P type

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.
100.0	$\pm 3\%$	9	300	0.9	1.3	4.50	3.20	80
100.0	$\pm 5\%$	9	300	0.9	1.3	4.50	3.20	80
110.0	$\pm 3\%$	9	300	0.8	1.1	5.00	3.50	80
110.0	$\pm 5\%$	9	300	0.8	1.1	5.00	3.50	80
120.0	$\pm 3\%$	9	300	0.8	1.0	5.00	3.79	80
120.0	$\pm 5\%$	9	300	0.8	1.0	5.00	3.79	80

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

· Short bar residual inductance = 0.43nH

Measurement equipment

Measurement item	Product No.	Manufacturer
L, Q	4291B+16197A	Keysight Technologies
Self-resonant frequency	8720C	Keysight Technologies
DC resistance	Type-7561	Yokogawa

* Equivalent measurement equipment may be used.

MLG0603P 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	
0.6	0.6	0.6	0.6	0.6	16min.	22min.	35min.	37min.	41min.	MLG0603P0N6BT000
0.6	0.6	0.6	0.6	0.6	16min.	22min.	35min.	37min.	41min.	MLG0603P0N6CT000
0.7	0.7	0.7	0.7	0.7	16min.	22min.	35min.	37min.	41min.	MLG0603P0N7BT000
0.7	0.7	0.7	0.7	0.7	16min.	22min.	35min.	37min.	41min.	MLG0603P0N7CT000
0.8	0.8	0.8	0.8	0.4	16	22	35	37	41	MLG0603P0N8BT000
0.8	0.8	0.8	0.8	0.4	16	22	35	37	41	MLG0603P0N8CT000
0.9	0.9	0.9	0.9	0.9	17	22	35	37	41	MLG0603P0N9BT000
0.9	0.9	0.9	0.9	0.9	17	22	35	37	41	MLG0603P0N9CT000
1.0	1.0	1.0	1.0	1.0	16	21	33	36	40	MLG0603P1N0BT000
1.0	1.0	1.0	1.0	1.0	16	21	33	36	40	MLG0603P1N0CT000
1.0	1.0	1.0	1.0	1.0	16	21	33	36	40	MLG0603P1N0ST000
1.1	1.1	1.1	1.1	1.1	17	23	36	38	43	MLG0603P1N1BT000
1.1	1.1	1.1	1.1	1.1	17	23	36	38	43	MLG0603P1N1CT000
1.1	1.1	1.1	1.1	1.1	17	23	36	38	43	MLG0603P1N1ST000
1.2	1.2	1.2	1.2	1.2	18	24	38	40	45	MLG0603P1N2BT000
1.2	1.2	1.2	1.2	1.2	18	24	38	40	45	MLG0603P1N2CT000
1.2	1.2	1.2	1.2	1.2	18	24	38	40	45	MLG0603P1N2ST000
1.3	1.3	1.3	1.3	1.3	17	22	34	36	40	MLG0603P1N3BT000
1.3	1.3	1.3	1.3	1.3	17	22	34	36	40	MLG0603P1N3CT000
1.3	1.3	1.3	1.3	1.3	17	22	34	36	40	MLG0603P1N3ST000
1.4	1.4	1.4	1.4	1.4	18	23	36	39	43	MLG0603P1N4BT000
1.4	1.4	1.4	1.4	1.4	18	23	36	39	43	MLG0603P1N4CT000
1.4	1.4	1.4	1.4	1.4	18	23	36	39	43	MLG0603P1N4ST000
1.5	1.5	1.5	1.5	1.5	17	22	33	35	39	MLG0603P1N5BT000
1.5	1.5	1.5	1.5	1.5	17	22	33	35	39	MLG0603P1N5CT000
1.5	1.5	1.5	1.5	1.5	17	22	33	35	39	MLG0603P1N5ST000
1.6	1.6	1.6	1.6	1.6	17	22	33	35	38	MLG0603P1N6BT000
1.6	1.6	1.6	1.6	1.6	17	22	33	35	38	MLG0603P1N6CT000
1.6	1.6	1.6	1.6	1.6	17	22	33	35	38	MLG0603P1N6ST000
1.7	1.7	1.7	1.7	1.7	17	22	33	35	39	MLG0603P1N7BT000
1.7	1.7	1.7	1.7	1.7	17	22	33	35	39	MLG0603P1N7CT000
1.7	1.7	1.7	1.7	1.7	17	22	33	35	39	MLG0603P1N7ST000
1.8	1.8	1.8	1.8	1.8	17	22	34	35	39	MLG0603P1N8BT000
1.8	1.8	1.8	1.8	1.8	17	22	34	35	39	MLG0603P1N8CT000
1.8	1.8	1.8	1.8	1.8	17	22	34	35	39	MLG0603P1N8ST000
1.9	1.9	1.9	1.9	1.9	18	24	36	38	42	MLG0603P1N9BT000
1.9	1.9	1.9	1.9	1.9	18	24	36	38	42	MLG0603P1N9CT000
1.9	1.9	1.9	1.9	1.9	18	24	36	38	42	MLG0603P1N9ST000
2.0	2	2.0	2.0	2.0	19	23	35	37	41	MLG0603P2N0BT000
2.0	2	2.0	2.0	2.0	19	23	35	37	41	MLG0603P2N0CT000
2.0	2	2.0	2.0	2.0	19	23	35	37	41	MLG0603P2N0ST000
2.1	2.1	2.1	2.1	2.1	18	23	34	36	39	MLG0603P2N1BT000
2.1	2.1	2.1	2.1	2.1	18	23	34	36	39	MLG0603P2N1CT000
2.1	2.1	2.1	2.1	2.1	18	23	34	36	39	MLG0603P2N1ST000
2.2	2.2	2.2	2.2	2.3	18	23	35	36	40	MLG0603P2N2BT000
2.2	2.2	2.2	2.2	2.3	18	23	35	36	40	MLG0603P2N2CT000
2.2	2.2	2.2	2.2	2.3	18	23	35	36	40	MLG0603P2N2ST000
2.3	2.3	2.3	2.4	2.4	18	22	33	35	38	MLG0603P2N3BT000
2.3	2.3	2.3	2.4	2.4	18	22	33	35	38	MLG0603P2N3CT000
2.3	2.3	2.3	2.4	2.4	18	22	33	35	38	MLG0603P2N3ST000

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

Measurement equipment

Product No.	Manufacturer
4291B+16197A	Keysight Technologies

* Equivalent measurement equipment may be used.

MLG0603P 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	
2.4	2.4	2.4	2.4	2.4	16	21	31	33	36	MLG0603P2N4BT000
2.4	2.4	2.4	2.4	2.4	16	21	31	33	36	MLG0603P2N4ST000
2.5	2.5	2.5	2.5	2.5	17	22	33	34	38	MLG0603P2N5BT000
2.5	2.5	2.5	2.5	2.5	17	22	33	34	38	MLG0603P2N5CT000
2.5	2.5	2.5	2.5	2.5	17	22	33	34	38	MLG0603P2N5ST000
2.6	2.6	2.6	2.6	2.6	17	22	33	35	38	MLG0603P2N6BT000
2.6	2.6	2.6	2.6	2.6	17	22	33	35	38	MLG0603P2N6CT000
2.6	2.6	2.6	2.6	2.6	17	22	33	35	38	MLG0603P2N6ST000
2.7	2.7	2.7	2.7	2.7	17	21	33	35	38	MLG0603P2N7BT000
2.7	2.7	2.7	2.7	2.7	17	21	33	35	38	MLG0603P2N7CT000
2.7	2.7	2.7	2.7	2.7	17	21	33	35	38	MLG0603P2N7ST000
2.8	2.8	2.8	2.8	2.9	17	22	34	36	40	MLG0603P2N8BT000
2.8	2.8	2.8	2.8	2.9	17	22	34	36	40	MLG0603P2N8CT000
2.8	2.8	2.8	2.8	2.9	17	22	34	36	40	MLG0603P2N8ST000
2.9	2.9	2.9	2.9	3.0	17	22	34	35	39	MLG0603P2N9BT000
2.9	2.9	2.9	2.9	3.0	17	22	34	35	39	MLG0603P2N9CT000
2.9	2.9	2.9	2.9	3.0	17	22	34	35	39	MLG0603P2N9ST000
3.0	3	3.0	3.1	3.1	17	21	32	34	37	MLG0603P3N0BT000
3.0	3	3.0	3.1	3.1	17	21	32	34	37	MLG0603P3N0CT000
3.0	3	3.0	3.1	3.1	17	21	32	34	37	MLG0603P3N0ST000
3.1	3.1	3.1	3.2	3.2	17	22	33	34	37	MLG0603P3N1BT000
3.1	3.1	3.1	3.2	3.2	17	22	33	34	37	MLG0603P3N1CT000
3.1	3.1	3.1	3.2	3.2	17	22	33	34	37	MLG0603P3N1ST000
3.2	3.2	3.2	3.3	3.3	17	22	34	35	38	MLG0603P3N2BT000
3.2	3.2	3.2	3.3	3.3	17	22	34	35	38	MLG0603P3N2CT000
3.2	3.2	3.2	3.3	3.3	17	22	34	35	38	MLG0603P3N2ST000
3.3	3.3	3.4	3.4	3.4	18	22	33	35	38	MLG0603P3N3BT000
3.3	3.3	3.4	3.4	3.4	18	22	33	35	38	MLG0603P3N3CT000
3.3	3.3	3.4	3.4	3.4	18	22	33	35	38	MLG0603P3N3ST000
3.4	3.4	3.5	3.5	3.6	18	23	34	35	38	MLG0603P3N4BT000
3.4	3.4	3.5	3.5	3.6	18	23	34	35	38	MLG0603P3N4CT000
3.4	3.4	3.5	3.5	3.6	18	23	34	35	38	MLG0603P3N4ST000
3.5	3.5	3.6	3.6	3.7	18	23	34	35	38	MLG0603P3N5BT000
3.5	3.5	3.6	3.6	3.7	18	23	34	35	38	MLG0603P3N5CT000
3.5	3.5	3.6	3.6	3.7	18	23	34	35	38	MLG0603P3N5ST000
3.6	3.6	3.7	3.7	3.8	18	22	33	34	37	MLG0603P3N6BT000
3.6	3.6	3.7	3.7	3.8	18	22	33	34	37	MLG0603P3N6CT000
3.6	3.6	3.7	3.7	3.8	18	22	33	34	37	MLG0603P3N6ST000
3.7	3.7	3.8	3.9	4.0	18	23	34	35	37	MLG0603P3N7BT000
3.7	3.7	3.8	3.9	4.0	18.0	23	34	35	37	MLG0603P3N7CT000
3.7	3.7	3.8	3.9	4.0	18.0	23	34	35	37	MLG0603P3N7ST000
3.8	3.8	3.9	4.0	4.1	17.0	22	32	33	36	MLG0603P3N8BT000
3.8	3.8	3.9	4.0	4.1	17.0	22	32	33	36	MLG0603P3N8CT000
3.8	3.8	3.9	4.0	4.1	17.0	22	32	33	36	MLG0603P3N8ST000
3.9	3.9	4.0	4.1	4.2	17.0	22	32	34	36	MLG0603P3N9BT000
3.9	3.9	4.0	4.1	4.2	17.0	22	32	34	36	MLG0603P3N9CT000
3.9	3.9	4.0	4.1	4.2	17.0	22	32	34	36	MLG0603P3N9ST000
4.0	4.0	4.1	4.2	4.4	18.0	22	32	33	36	MLG0603P4N0BT000
4.0	4.0	4.1	4.2	4.4	18.0	22	32	33	36	MLG0603P4N0CT000
4.0	4.0	4.1	4.2	4.4	18.0	22	32	33	36	MLG0603P4N0ST000

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

Measurement equipment

Product No.	Manufacturer
4291B+16197A	Keysight Technologies

* Equivalent measurement equipment may be used.

MLG0603P 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	
4.1	4.1	4.3	4.3	4.5	18.0	22	33	34	36	MLG0603P4N1BT000
4.1	4.1	4.3	4.3	4.5	18.0	22	33	34	36	MLG0603P4N1CT000
4.1	4.1	4.3	4.3	4.5	18.0	22	33	34	36	MLG0603P4N1ST000
4.2	4.2	4.4	4.5	4.6	18.0	22	32	33	35	MLG0603P4N2BT000
4.2	4.2	4.4	4.5	4.6	18.0	22	32	33	35	MLG0603P4N2CT000
4.2	4.2	4.4	4.5	4.6	18	22	32	33	35	MLG0603P4N2ST000
4.3	4.3	4.5	4.5	4.7	17	21	32	33	35	MLG0603P4N3ST000
4.3	4.3	4.5	4.5	4.7	17	21	32	33	35	MLG0603P4N3HT000
4.3	4.3	4.5	4.5	4.7	17	21	32	33	35	MLG0603P4N3JT000
4.7	4.7	4.9	5.0	5.1	16	21	31	32	34	MLG0603P4N7ST000
4.7	4.7	4.9	5.0	5.1	16	21	31	32	34	MLG0603P4N7HT000
4.7	4.7	4.9	5.0	5.1	16	21	31	32	34	MLG0603P4N7JT000
5.1	5.1	5.3	5.4	5.7	16	21	31	32	34	MLG0603P5N1ST000
5.1	5.1	5.3	5.4	5.7	16	21	31	32	34	MLG0603P5N1HT000
5.1	5.1	5.3	5.4	5.7	16	21	31	32	34	MLG0603P5N1JT000
5.6	5.6	6.1	6.2	6.6	18	22	31	32	32	MLG0603P5N6ST000
5.6	5.6	6.1	6.2	6.6	18	22	31	32	32	MLG0603P5N6HT000
5.6	5.6	6.1	6.2	6.6	18	22	31	32	32	MLG0603P5N6JT000
6.2	6.2	6.5	6.7	7.0	16	21	30	31	33	MLG0603P6N2ST000
6.2	6.2	6.5	6.7	7.0	16	21	30	31	33	MLG0603P6N2HT000
6.2	6.2	6.5	6.7	7.0	16	21	30	31	33	MLG0603P6N2JT000
6.8	6.8	7.3	7.5	8.0	16	21	29	30	31	MLG0603P6N8HT000
6.8	6.8	7.3	7.5	8.0	16	21	29	30	31	MLG0603P6N8JT000
7.5	7.5	8.1	8.3	8.8	16	21	30	30	32	MLG0603P7N5HT000
7.5	7.5	8.1	8.3	8.8	16	21	30	30	32	MLG0603P7N5JT000
8.2	8.2	9.0	9.3	10.0	17	21	30	30	31	MLG0603P8N2HT000
8.2	8.2	9.0	9.3	10.0	17	21	30	30	31	MLG0603P8N2JT000
9.1	9.1	10.0	10.3	11.1	17	21	30	31	32	MLG0603P9N1HT000
9.1	9.1	10.0	10.3	11.1	17	21	30	31	32	MLG0603P9N1JT000
10	10	11	12	13	16	21	28	28	28	MLG0603P10NHT000
10	10	11	12	13	16	21	28	28	28	MLG0603P10NJT000
11	11	13	13	15	18	23	30	30	30	MLG0603P11NHT000
11	11	13	13	15	18	23	30	30	30	MLG0603P11NJT000
12	12	14	15	17	18	22	28	28	27	MLG0603P12NHT000
12	12	14	15	17	18	22	28	28	27	MLG0603P12NJT000
13	13	15	16	19	18	22	28	28	26	MLG0603P13NHT000
13	13	15	16	19	18	22	28	28	26	MLG0603P13NJT000
15	15	18	20	24	18	22	27	26	24	MLG0603P15NHT000
15	15	18	20	24	18	22	27	26	24	MLG0603P15NJT000
16	16	20	22	27	18	22	26	25	22	MLG0603P16NHT000
16	16	20	22	27	18	22	26	25	22	MLG0603P16NJT000
18	18	23	26	33	18	22	25	24	20	MLG0603P18NHT000
18	18	23	26	33	18	22	25	24	20	MLG0603P18NJT000
20	21	27	31	42	18	22	23	22	17	MLG0603P20NHT000
20	21	27	31	42	18	22	23	22	17	MLG0603P20NJT000
22	23	34	40	68	18	21	21	18	11	MLG0603P22NHT000
22	23	34	40	68	18	21	21	18	11	MLG0603P22NJT000
24	25	36	43	72	19	22	21	18	11	MLG0603P24NHT000
24	25	36	43	72	19	22	21	18	11	MLG0603P24NJT000
27	28	45	57		18	21	18	15		MLG0603P27NHT000
27	28	45	57		18	21	18	15		MLG0603P27NJT000

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

Measurement equipment

Product No.	Manufacturer
4291B+16197A	Keysight Technologies

* Equivalent measurement equipment may be used.

MLG0603P 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	
30	32	59			18	21	15			MLG0603P30NHT000
30	32	59			18	21	15			MLG0603P30NJT000
33	36	68			15	17	11			MLG0603P33NHT000
33	36	68			15	17	11			MLG0603P33NJT000
37	39				16	17				MLG0603P36NHT000
37	39				16	17				MLG0603P36NJT000
40	43				15	17				MLG0603P39NHT000
40	43				15	17				MLG0603P39NJT000
44	48				15	16				MLG0603P43NHT000
44	48				15	16				MLG0603P43NJT000
48	53				15	16				MLG0603P47NHT000
48	53				15	16				MLG0603P47NJT000
53	59				15	16				MLG0603P51NHT000
53	59				15	16				MLG0603P51NJT000
58	66				15	15				MLG0603P56NHT000
58	66				15	15				MLG0603P56NJT000
65	76				15	15				MLG0603P62NHT000
65	76				15	15				MLG0603P62NJT000
71	82				15	15				MLG0603P68NHT000
71	82				15	15				MLG0603P68NJT000
79	97				14	13				MLG0603P75NHT000
79	97				14	13				MLG0603P75NJT000
87	109				14	13				MLG0603P82NHT000
87	109				14	13				MLG0603P82NJT000
99	132				13	12				MLG0603P91NHT000
99	132				13	12				MLG0603P91NJT000
110	152				14	12				MLG0603PR10HT000
110	152				14	12				MLG0603PR10JT000
126	211				13	9				MLG0603PR11HT000
126	211				13	9				MLG0603PR11JT000
151					12					MLG0603PR12HT000
151					12					MLG0603PR12JT000

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

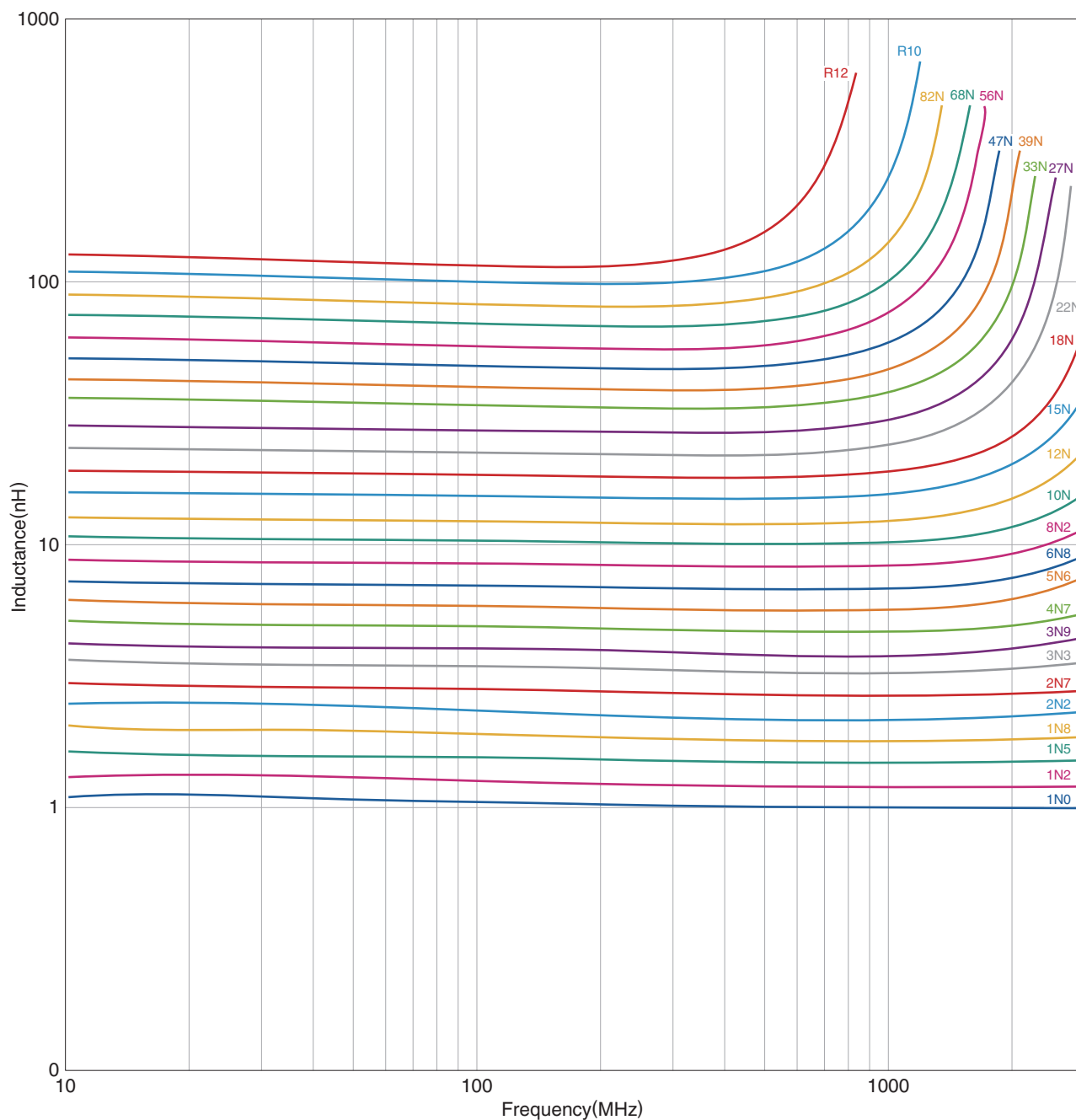
Measurement equipment

Product No.	Manufacturer
4291B+16197A	Keysight Technologies

* Equivalent measurement equipment may be used.

MLG0603P type

L FREQUENCY CHARACTERISTICS (EXAMPLE)



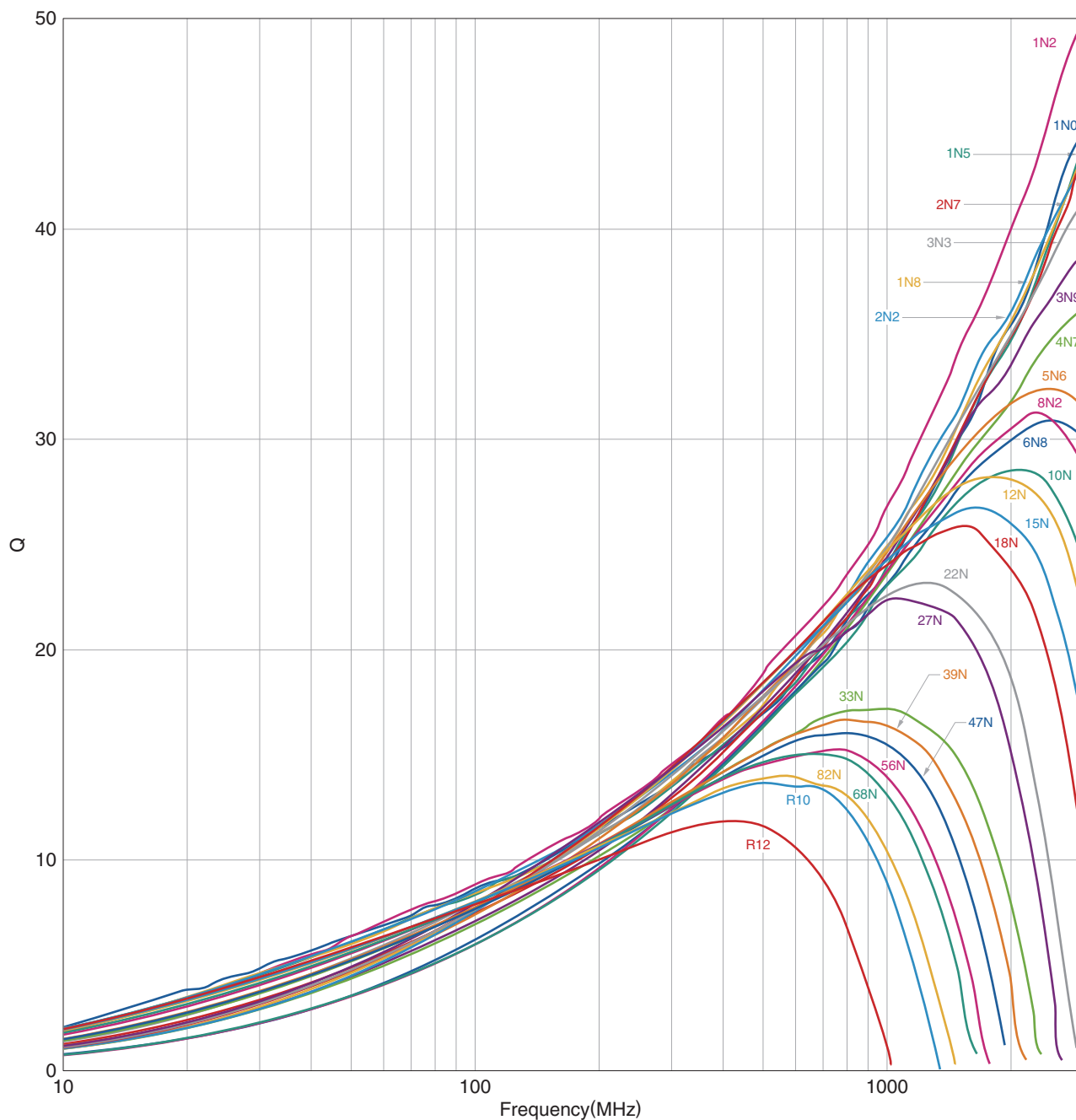
Measurement equipment

Product No.	Manufacturer
E4991A+16197A	Keysight Technologies

* Equivalent measurement equipment may be used.

MLG0603P type

Q FREQUENCY CHARACTERISTICS (EXAMPLE)



Measurement equipment

Product No.	Manufacturer
E4991A+16197A	Keysight Technologies

* Equivalent measurement equipment may be used.

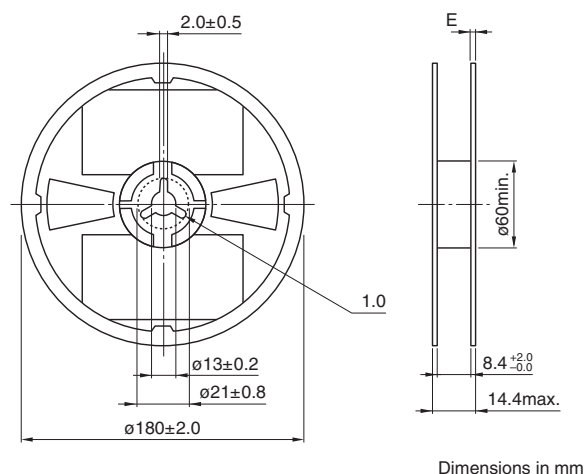
■ SHAPE & DIMENSIONS



Dimensions in mm

The graph illustrates the temperature profile over time for a heat treatment process. The y-axis represents Temperature and the x-axis represents Time. The process consists of three main stages: Preheating, Soldering, and Natural cooling. The Preheating stage starts at 150°C and rises to 180°C, taking 60 to 120 seconds. The Soldering stage starts at 180°C, rises to a peak of 250 to 260°C, and then cools back down to 230°C, taking 30 to 60 seconds. The peak temperature is maintained for a maximum of 10 seconds. The Natural cooling stage follows the Soldering stage.

REEL DIMENSIONS



Technical drawing of a sprocket hole assembly. The main view shows a horizontal bar with five sprocket holes. Dimensions include: hole diameter $1.5^{+0.1}_{-0.0}$, hole-to-hole pitch 2.0 ± 0.05 , distance from end to first hole 1.5 ± 0.1 , distance between first and second hole 4.0 ± 0.1 , distance from end to last hole 1.75 ± 0.1 , total length 3.5 ± 0.05 , and bar thickness 8.0 ± 0.3 . A detail view on the left shows a cross-section of the bar with dimensions B (width) and K (thickness). Labels include 'Sprocket hole' and 'Cavity'.

Dimensions in mm

160min. Taping 200min. 300min.

Drawing direction →

Dimensions in mm

Package quantity	15000 pcs/reel
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Operating temperature range	Storage temperature range*	Individual weight
-55 to +125 °C	-55 to +125 °C	0.2 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.

SAFETY REMINDERS

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

REMINDERS

- 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.
- 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.

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- ⊖ [TDK Corporation](#) Information

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