



The LQG10A/11A Series is designed to have stable characteristics in high frequency range by applying an integrated multilayer process.

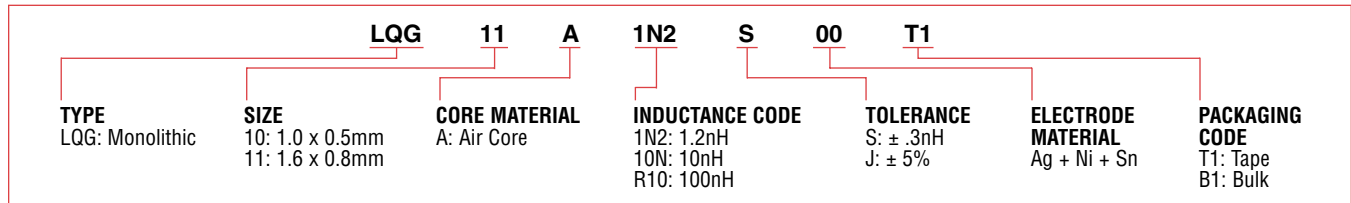
### FEATURES

- High-Q characteristics
- Small size of 0402/0603 is suitable for small portable equipment, especially for card size equipment.
- The external electrodes with nickel barrier structure provide excellent solder heat resistance.

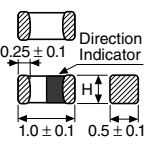
### APPLICATIONS

- High frequency circuit of telecommunication equipment

### PART NUMBERING SYSTEM

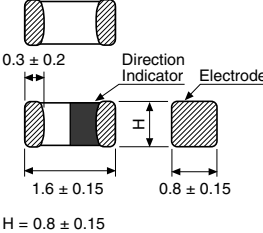


### SPECIFICATIONS

| Dimensions: mm   | Part Number   | Inductance         |           |                      | Q                    |                      |                | DC Resistance (Ohms max.) | Self-resonant Frequency (MHz min.) | Allowable Current (mA) | Operating Temp. Range |                     |              |
|--|---------------|--------------------|-----------|----------------------|----------------------|----------------------|----------------|---------------------------|------------------------------------|------------------------|-----------------------|---------------------|--------------|
|  |               | Nominal Value (nH) | Tolerance | Test Frequency (MHz) | Nominal Value (min.) | Test Frequency (MHz) | Typ. at 500MHz |                           |                                    |                        |                       | Typ. at 800MHz      | Typ. at 1GHz |
|  <p>H = 0.5 ± 0.1</p> | *LQG10A1N2S00 | 1.2                | ±0.3nH    | 100                  | 8                    | 100                  | 25             | 35                        | 38                                 | 0.10                   | 6000                  | -40°C<br>~<br>+85°C |              |
|  | *LQG10A1N5S00 | 1.5                |           |                      |                      |                      |                | 33                        | 34                                 |                        |                       |                     |              |
|  | *LQG10A1N8S00 | 1.8                |           |                      |                      |                      | 24             | 31                        | 34                                 | 0.15                   |                       |                     |              |
|  | *LQG10A2N2S00 | 2.2                |           |                      |                      |                      |                | 30                        | 33                                 |                        |                       |                     |              |
|  | *LQG10A2N7S00 | 2.7                |           |                      |                      |                      | 22             | 29                        | 32                                 | 0.17                   |                       |                     |              |
|  | *LQG10A3N3S00 | 3.3                |           |                      |                      |                      |                |                           | 30                                 | 33                     |                       |                     | 0.19         |
|  | *LQG10A3N9S00 | 3.9                |           |                      |                      |                      |                |                           |                                    |                        |                       |                     | 0.23         |
|  | *LQG10A4N7S00 | 4.7                |           |                      |                      |                      | 23             | 29                        | 32                                 | 0.26                   |                       |                     | 5300         |
|  | *LQG10A5N6S00 | 5.6                |           |                      |                      |                      |                |                           |                                    | 0.29                   |                       |                     |              |
|  | *LQG10A6N8J00 | 6.8                |           |                      |                      |                      | ±5%            | 100                       | 8                                  | 100                    |                       |                     | 24           |
|  | *LQG10A8N2J00 | 8.2                | 30        | 33                   | 0.35                 | 3200                 |                |                           |                                    |                        |                       |                     |              |
|  | *LQG10A10NJ00 | 10                 | 23        | 27                   | 27                   |                      |                |                           |                                    |                        | 0.41                  |                     | 2800         |
|  | *LQG10A12NJ00 | 12                 |           |                      |                      | 0.46                 |                |                           |                                    |                        | 2300                  |                     |              |
|  | *LQG10A15NJ00 | 15                 | 22        | 23                   | 24                   | 0.51                 |                |                           |                                    |                        |                       |                     | 2100         |
|  | *LQG10A18NJ00 | 18                 |           |                      |                      | 0.58                 |                |                           |                                    |                        | 1800                  |                     |              |
|  | *LQG10A22NJ00 | 22                 | 0.67      | 1600                 |                      |                      |                |                           |                                    |                        |                       |                     |              |
|  | *LQG10A27NJ00 | 27                 | 1500      |                      |                      |                      |                |                           |                                    |                        |                       |                     |              |
|  | *LQG10A33NJ00 | 33                 |           |                      |                      |                      |                |                           |                                    |                        |                       |                     |              |

\* Available as standard through authorized Murata Electronics Distributors.

**SPECIFICATIONS**

| Dimensions: mm  | Part Number   | Inductance         |           |                      | Q                    |                      | DC Resistance (Ohms max.) | Self-resonant Frequency (MHz min.) | Allowable Current (mA) | Operating Temp. Range |
|---|---------------|--------------------|-----------|----------------------|----------------------|----------------------|---------------------------|------------------------------------|------------------------|-----------------------|
|   |               | Nominal Value (nH) | Tolerance | Test Frequency (MHz) | Nominal Value (min.) | Test Frequency (MHz) |                           |                                    |                        |                       |
|  <p>H = 0.8 ± 0.15</p> | *LQG11A1N2S00 | 1.2                | ±0.3nH    | 100                  | 12                   | 100                  | 0.10                      | 6000                               | 300                    | -40°C<br>~<br>+85°C   |
|   | *LQG11A1N5S00 | 1.5                |           |                      |                      |                      |                           |                                    |                        |                       |
|   | *LQG11A1N8S00 | 1.8                |           |                      |                      |                      |                           |                                    |                        |                       |
|   | *LQG11A2N2S00 | 2.2                |           |                      |                      |                      |                           |                                    |                        |                       |
|   | *LQG11A2N7S00 | 2.7                |           |                      |                      |                      |                           |                                    |                        |                       |
|   | *LQG11A3N3S00 | 3.3                |           |                      |                      |                      |                           |                                    |                        |                       |
|   | *LQG11A3N9S00 | 3.9                |           |                      |                      |                      |                           |                                    |                        |                       |
|   | *LQG11A4N7S00 | 4.7                |           |                      |                      |                      |                           |                                    |                        |                       |
|   | *LQG11A5N6S00 | 5.6                |           |                      |                      |                      |                           |                                    |                        |                       |
|   | *LQG11A6N8J00 | 6.8                |           |                      |                      |                      |                           |                                    |                        |                       |
|   | *LQG11A8N2J00 | 8.2                | ±5%       |                      |                      |                      | 0.15                      | 5000                               |                        |                       |
|   | *LQG11A10NJ00 | 10                 |           |                      |                      |                      |                           |                                    |                        |                       |
|   | *LQG11A12NJ00 | 12                 |           |                      |                      |                      |                           |                                    |                        |                       |
|   | *LQG11A15NJ00 | 15                 |           |                      |                      |                      |                           |                                    |                        |                       |
|   | *LQG11A18NJ00 | 18                 |           |                      |                      |                      |                           |                                    |                        |                       |
|   | *LQG11A22NJ00 | 22                 |           |                      |                      |                      |                           |                                    |                        |                       |
|   | *LQG11A27NJ00 | 27                 |           |                      |                      |                      |                           |                                    |                        |                       |
|   | *LQG11A33NJ00 | 33                 |           |                      |                      |                      |                           |                                    |                        |                       |
|   | *LQG11A39NJ00 | 39                 |           |                      |                      |                      |                           |                                    |                        |                       |
|   | *LQG11A47NJ00 | 47                 |           |                      |                      |                      |                           |                                    |                        |                       |
|   | *LQG11A56NJ00 | 56                 |           |                      |                      |                      |                           |                                    |                        |                       |
| *LQG11A68NJ00   | 68            |                    |           |                      |                      |                      |                           |                                    |                        |                       |
| *LQG11A82NJ00   | 82            |                    |           |                      |                      |                      |                           |                                    |                        |                       |
| *LQG11AR10J00   | 100           |                    |           |                      |                      |                      |                           |                                    |                        |                       |
|   |               |                    |           |                      |                      | 0.20                 | 4000                      |                                    |                        |                       |
|   |               |                    |           |                      |                      | 0.25                 |                           |                                    |                        |                       |
|   |               |                    |           |                      |                      | 0.30                 | 3500                      |                                    |                        |                       |
|   |               |                    |           |                      |                      | 0.35                 | 3000                      |                                    |                        |                       |
|   |               |                    |           |                      |                      | 0.40                 | 2800                      |                                    |                        |                       |
|   |               |                    |           |                      |                      | 0.45                 | 2600                      |                                    |                        |                       |
|   |               |                    |           |                      |                      | 0.50                 | 2300                      |                                    |                        |                       |
|   |               |                    |           |                      |                      | 0.55                 | 2000                      |                                    |                        |                       |
|   |               |                    |           |                      |                      | 0.60                 | 1700                      |                                    |                        |                       |
|   |               |                    |           |                      |                      | 0.65                 | 1500                      |                                    |                        |                       |
|   |               |                    |           |                      |                      | 0.70                 | 1200                      |                                    |                        |                       |
|   |               |                    |           |                      |                      | 0.75                 | 1100                      |                                    |                        |                       |
|   |               |                    |           |                      |                      | 0.80                 | 1000                      |                                    |                        |                       |
|   |               |                    |           |                      |                      | 0.85                 | 900                       |                                    |                        |                       |
|   |               |                    |           |                      |                      | 0.90                 | 800                       |                                    |                        |                       |

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**TYPICAL ELECTRICAL CHARACTERISTICS**

**Q-FREQUENCY CHARACTERISTICS**

**INDUCTANCE-FREQUENCY CHARACTERISTICS**

