



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

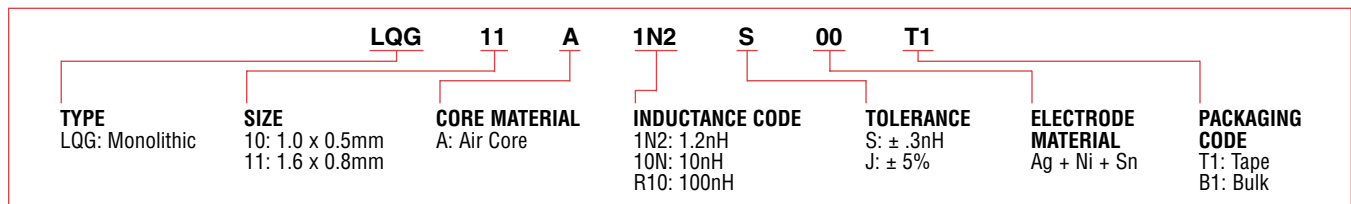
### FEATURES

- 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.

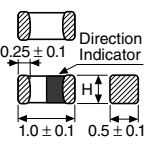
### APPLICATIONS

- High frequency circuit of telecommunication equipment

### PART NUMBERING SYSTEM

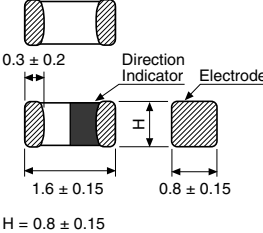


### SPECIFICATIONS

| 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                  | 200            | -40°C<br>~<br>+85°C |      |
|  | *LQG10A1N5S00 | 1.5                |           |                      |                      |                      |                | 33                        |                                    |                        |                       |                |                     |      |
|  | *LQG10A1N8S00 | 1.8                |           |                      |                      |                      |                | 34                        |                                    |                        |                       |                |                     |      |
|  | *LQG10A2N2S00 | 2.2                |           |                      |                      |                      | 22             | 30                        | 33                                 |                        |                       |                |                     | 0.15 |
|  | *LQG10A2N7S00 | 2.7                |           |                      |                      |                      |                | 29                        | 32                                 |                        |                       |                |                     | 0.17 |
|  | *LQG10A3N3S00 | 3.3                |           |                      |                      |                      |                |                           | 0.19                               |                        |                       |                |                     |      |
|  | *LQG10A3N9S00 | 3.9                |           |                      |                      |                      | 23             | 30                        | 33                                 |                        |                       |                |                     | 0.23 |
|  | *LQG10A4N7S00 | 4.7                |           |                      |                      |                      |                | 29                        | 32                                 |                        |                       |                |                     | 0.26 |
|  | *LQG10A5N6S00 | 5.6                |           |                      |                      |                      |                |                           | 4200                               |                        |                       |                |                     |      |
|  | *LQG10A6N8J00 | 6.8                | ±5%       |                      |                      |                      | 24             | 31                        | 34                                 | 0.33                   | 3600                  |                |                     |      |
|  | *LQG10A8N2J00 | 8.2                |           |                      |                      |                      |                | 0.35                      |                                    | 3200                   |                       |                |                     |      |
|  | *LQG10A10NJ00 | 10                 |           |                      |                      |                      |                | 0.41                      |                                    | 2800                   |                       |                |                     |      |
|  | *LQG10A12NJ00 | 12                 |           |                      |                      |                      | 23             | 30                        | 33                                 | 0.46                   | 2300                  |                |                     |      |
|  | *LQG10A15NJ00 | 15                 |           |                      |                      |                      |                | 29                        | 32                                 | 0.51                   | 2100                  |                |                     |      |
|  | *LQG10A18NJ00 | 18                 |           |                      |                      |                      |                |                           | 1800                               |                        |                       |                |                     |      |
|  | *LQG10A22NJ00 | 22                 |           |                      |                      |                      | 22             | 28                        | 31                                 | 0.58                   | 1800                  |                |                     |      |
|  | *LQG10A27NJ00 | 27                 |           |                      |                      |                      |                | 1600                      |                                    |                        |                       |                |                     |      |
|  | *LQG10A33NJ00 | 33                 |           |                      |                      |                      |                | 1500                      |                                    |                        |                       |                |                     |      |

\* Available as standard through authorized Murata Electronics Distributors.

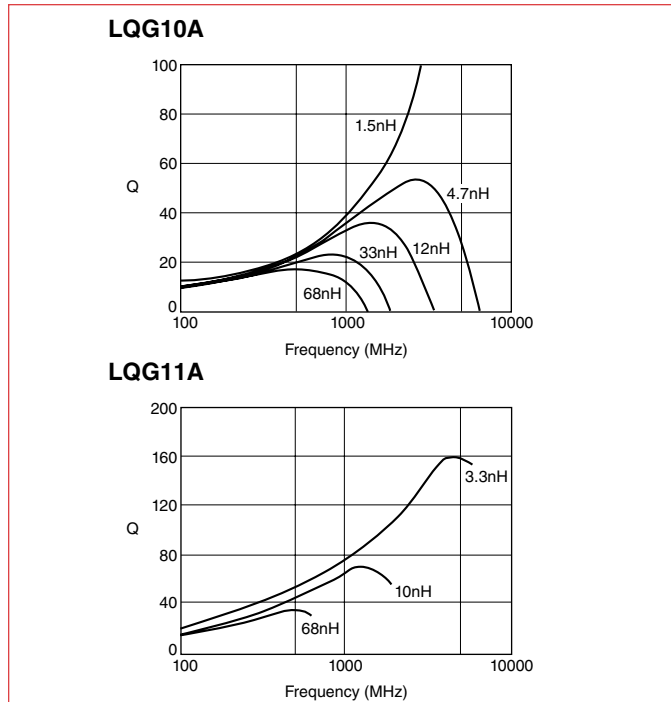
### SPECIFICATIONS

| 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            | 0.20               | 3500      |                      |                      |                      |                           |                                    |                        |                       |
| *LQG11A68NJ00   | 68            |                    |           |                      |                      |                      |                           |                                    |                        |                       |
| *LQG11A82NJ00   | 82            |                    |           |                      |                      |                      |                           |                                    |                        |                       |
| *LQG11AR10J00   | 100           |                    |           |                      |                      |                      |                           |                                    |                        |                       |
|   |               |                    |           |                      |                      |                      | 0.25                      | 4000                               |                        |                       |
|   |               |                    |           |                      |                      |                      | 0.30                      | 3000                               |                        |                       |
|   |               |                    |           |                      |                      |                      | 0.35                      | 2800                               |                        |                       |
|   |               |                    |           |                      |                      |                      | 0.40                      | 2600                               |                        |                       |
|   |               |                    |           |                      |                      |                      | 0.45                      | 2300                               |                        |                       |
|   |               |                    |           |                      |                      |                      | 0.50                      | 2000                               |                        |                       |
|   |               |                    |           |                      |                      |                      | 0.55                      | 1700                               |                        |                       |
|   |               |                    |           |                      |                      |                      | 0.60                      | 1500                               |                        |                       |
|   |               |                    |           |                      |                      |                      | 0.65                      | 1200                               |                        |                       |
|   |               |                    |           |                      |                      |                      | 0.70                      | 1100                               |                        |                       |
|   |               |                    |           |                      |                      |                      | 0.75                      | 1000                               |                        |                       |
|   |               |                    |           |                      |                      |                      | 0.80                      | 900                                |                        |                       |
|   |               |                    |           |                      |                      |                      | 0.85                      | 800                                |                        |                       |
|   |               |                    |           |                      |                      |                      | 0.90                      | 800                                |                        |                       |

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### TYPICAL ELECTRICAL CHARACTERISTICS

#### Q-FREQUENCY CHARACTERISTICS



#### INDUCTANCE-FREQUENCY CHARACTERISTICS

