



**THE DATASHEET OF  
MLG1005S4N3CT000**



Inductors for high frequency circuits  
Multilayer ceramic  
MLG series



## MLG1005S type



### FEATURES

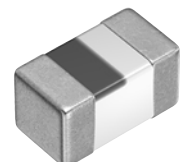
- Advanced monolithic structure is formed using a multilayering and sintering process with ceramic and conductive materials for high-frequency.
- Operating temperature range: -55 to +125°C

### 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         | 1005                               | S                     | 0N3             | B                    | T               | 000           |
| Series name | LxWxH dimensions<br>1.0x0.5x0.5 mm | Product internal code | Inductance (nH) | Inductance tolerance | Packaging style | Internal code |



## MLG1005S type

## CHARACTERISTICS SPECIFICATION TABLE

| L<br>(nH) | Q<br>Tolerance | Q<br>min. | L, Q measuring<br>frequency<br>(MHz) | Self-resonant<br>frequency |           | DC resistance    |                  | Rated current<br>(mA)max. | Part No.*                        |
|-----------|----------------|-----------|--------------------------------------|----------------------------|-----------|------------------|------------------|---------------------------|----------------------------------|
|           |                |           |                                      | (GHz)min.                  | (GHz)typ. | ( $\Omega$ )max. | ( $\Omega$ )typ. |                           |                                  |
| 0.3       | $\pm 0.1$ nH   | —         | 100                                  | 10.0                       | 20up      | 0.10             | 0.01             | 1000                      | <a href="#">MLG1005S0N3BT000</a> |
| 0.3       | $\pm 0.2$ nH   | —         | 100                                  | 10.0                       | 20up      | 0.10             | 0.01             | 1000                      | <a href="#">MLG1005S0N3CT000</a> |
| 0.4       | $\pm 0.1$ nH   | —         | 100                                  | 10.0                       | 20up      | 0.10             | 0.01             | 1000                      | <a href="#">MLG1005S0N4BT000</a> |
| 0.4       | $\pm 0.2$ nH   | —         | 100                                  | 10.0                       | 20up      | 0.10             | 0.01             | 1000                      | <a href="#">MLG1005S0N4CT000</a> |
| 0.5       | $\pm 0.1$ nH   | —         | 100                                  | 10.0                       | 20up      | 0.10             | 0.01             | 1000                      | <a href="#">MLG1005S0N5BT000</a> |
| 0.5       | $\pm 0.2$ nH   | —         | 100                                  | 10.0                       | 20up      | 0.10             | 0.01             | 1000                      | <a href="#">MLG1005S0N5CT000</a> |
| 0.6       | $\pm 0.1$ nH   | —         | 100                                  | 10.0                       | 20up      | 0.10             | 0.01             | 1000                      | <a href="#">MLG1005S0N6BT000</a> |
| 0.6       | $\pm 0.2$ nH   | —         | 100                                  | 10.0                       | 20up      | 0.10             | 0.01             | 1000                      | <a href="#">MLG1005S0N6CT000</a> |
| 0.7       | $\pm 0.1$ nH   | —         | 100                                  | 10.0                       | 18.7      | 0.10             | 0.02             | 1000                      | <a href="#">MLG1005S0N7BT000</a> |
| 0.7       | $\pm 0.2$ nH   | —         | 100                                  | 10.0                       | 18.7      | 0.10             | 0.02             | 1000                      | <a href="#">MLG1005S0N7CT000</a> |
| 0.8       | $\pm 0.1$ nH   | —         | 100                                  | 10.0                       | 16.4      | 0.10             | 0.02             | 1000                      | <a href="#">MLG1005S0N8BT000</a> |
| 0.8       | $\pm 0.2$ nH   | —         | 100                                  | 10.0                       | 16.4      | 0.10             | 0.02             | 1000                      | <a href="#">MLG1005S0N8CT000</a> |
| 0.9       | $\pm 0.1$ nH   | —         | 100                                  | 10.0                       | 17.7      | 0.10             | 0.04             | 1000                      | <a href="#">MLG1005S0N9BT000</a> |
| 0.9       | $\pm 0.2$ nH   | —         | 100                                  | 10.0                       | 17.7      | 0.10             | 0.04             | 1000                      | <a href="#">MLG1005S0N9CT000</a> |
| 1.0       | $\pm 0.1$ nH   | 7         | 100                                  | 10.0                       | 13.8      | 0.10             | 0.04             | 1000                      | <a href="#">MLG1005S1N0BT000</a> |
| 1.0       | $\pm 0.2$ nH   | 7         | 100                                  | 10.0                       | 13.8      | 0.10             | 0.04             | 1000                      | <a href="#">MLG1005S1N0CT000</a> |
| 1.0       | $\pm 0.3$ nH   | 7         | 100                                  | 10.0                       | 13.8      | 0.10             | 0.04             | 1000                      | <a href="#">MLG1005S1N0ST000</a> |
| 1.1       | $\pm 0.1$ nH   | 7         | 100                                  | 10.0                       | 19.3      | 0.10             | 0.03             | 1000                      | <a href="#">MLG1005S1N1BT000</a> |
| 1.1       | $\pm 0.2$ nH   | 7         | 100                                  | 10.0                       | 19.3      | 0.10             | 0.03             | 1000                      | <a href="#">MLG1005S1N1CT000</a> |
| 1.1       | $\pm 0.3$ nH   | 7         | 100                                  | 10.0                       | 19.3      | 0.10             | 0.03             | 1000                      | <a href="#">MLG1005S1N1ST000</a> |
| 1.2       | $\pm 0.1$ nH   | 7         | 100                                  | 10.0                       | 11.6      | 0.10             | 0.04             | 1000                      | <a href="#">MLG1005S1N2BT000</a> |
| 1.2       | $\pm 0.2$ nH   | 7         | 100                                  | 10.0                       | 11.6      | 0.10             | 0.04             | 1000                      | <a href="#">MLG1005S1N2CT000</a> |
| 1.2       | $\pm 0.3$ nH   | 7         | 100                                  | 10.0                       | 11.6      | 0.10             | 0.04             | 1000                      | <a href="#">MLG1005S1N2ST000</a> |
| 1.3       | $\pm 0.1$ nH   | 7         | 100                                  | 8.0                        | 11.7      | 0.10             | 0.04             | 1000                      | <a href="#">MLG1005S1N3BT000</a> |
| 1.3       | $\pm 0.2$ nH   | 7         | 100                                  | 8.0                        | 11.7      | 0.10             | 0.04             | 1000                      | <a href="#">MLG1005S1N3CT000</a> |
| 1.3       | $\pm 0.3$ nH   | 7         | 100                                  | 8.0                        | 11.7      | 0.10             | 0.04             | 1000                      | <a href="#">MLG1005S1N3ST000</a> |
| 1.5       | $\pm 0.1$ nH   | 7         | 100                                  | 8.0                        | 9.6       | 0.10             | 0.06             | 1000                      | <a href="#">MLG1005S1N5BT000</a> |
| 1.5       | $\pm 0.2$ nH   | 7         | 100                                  | 8.0                        | 9.6       | 0.10             | 0.06             | 1000                      | <a href="#">MLG1005S1N5CT000</a> |
| 1.5       | $\pm 0.3$ nH   | 7         | 100                                  | 8.0                        | 9.6       | 0.10             | 0.06             | 1000                      | <a href="#">MLG1005S1N5ST000</a> |
| 1.6       | $\pm 0.1$ nH   | 7         | 100                                  | 7.5                        | 9.4       | 0.12             | 0.05             | 1000                      | <a href="#">MLG1005S1N6BT000</a> |
| 1.6       | $\pm 0.2$ nH   | 7         | 100                                  | 7.5                        | 9.4       | 0.12             | 0.05             | 1000                      | <a href="#">MLG1005S1N6CT000</a> |
| 1.6       | $\pm 0.3$ nH   | 7         | 100                                  | 7.5                        | 9.4       | 0.12             | 0.05             | 1000                      | <a href="#">MLG1005S1N6ST000</a> |
| 1.8       | $\pm 0.1$ nH   | 7         | 100                                  | 8.0                        | 10.3      | 0.15             | 0.06             | 900                       | <a href="#">MLG1005S1N8BT000</a> |
| 1.8       | $\pm 0.2$ nH   | 7         | 100                                  | 8.0                        | 10.3      | 0.15             | 0.06             | 900                       | <a href="#">MLG1005S1N8CT000</a> |
| 1.8       | $\pm 0.3$ nH   | 7         | 100                                  | 8.0                        | 10.3      | 0.15             | 0.06             | 900                       | <a href="#">MLG1005S1N8ST000</a> |
| 2.0       | $\pm 0.1$ nH   | 7         | 100                                  | 7.5                        | 9.3       | 0.15             | 0.07             | 900                       | <a href="#">MLG1005S2N0BT000</a> |
| 2.0       | $\pm 0.2$ nH   | 7         | 100                                  | 7.5                        | 9.3       | 0.15             | 0.07             | 900                       | <a href="#">MLG1005S2N0CT000</a> |
| 2.0       | $\pm 0.3$ nH   | 7         | 100                                  | 7.5                        | 9.3       | 0.15             | 0.07             | 900                       | <a href="#">MLG1005S2N0ST000</a> |
| 2.2       | $\pm 0.1$ nH   | 7         | 100                                  | 7.0                        | 8.6       | 0.15             | 0.08             | 900                       | <a href="#">MLG1005S2N2BT000</a> |
| 2.2       | $\pm 0.2$ nH   | 7         | 100                                  | 7.0                        | 8.6       | 0.15             | 0.08             | 900                       | <a href="#">MLG1005S2N2CT000</a> |
| 2.2       | $\pm 0.3$ nH   | 7         | 100                                  | 7.0                        | 8.6       | 0.15             | 0.08             | 900                       | <a href="#">MLG1005S2N2ST000</a> |
| 2.4       | $\pm 0.1$ nH   | 7         | 100                                  | 7.0                        | 8.2       | 0.15             | 0.08             | 800                       | <a href="#">MLG1005S2N4BT000</a> |
| 2.4       | $\pm 0.2$ nH   | 7         | 100                                  | 7.0                        | 8.2       | 0.15             | 0.08             | 800                       | <a href="#">MLG1005S2N4CT000</a> |
| 2.4       | $\pm 0.3$ nH   | 7         | 100                                  | 7.0                        | 8.2       | 0.15             | 0.08             | 800                       | <a href="#">MLG1005S2N4ST000</a> |
| 2.7       | $\pm 0.1$ nH   | 7         | 100                                  | 6.0                        | 7.3       | 0.15             | 0.08             | 800                       | <a href="#">MLG1005S2N7BT000</a> |
| 2.7       | $\pm 0.2$ nH   | 7         | 100                                  | 6.0                        | 7.3       | 0.15             | 0.08             | 800                       | <a href="#">MLG1005S2N7CT000</a> |
| 2.7       | $\pm 0.3$ nH   | 7         | 100                                  | 6.0                        | 7.3       | 0.15             | 0.08             | 800                       | <a href="#">MLG1005S2N7ST000</a> |

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

## Measurement equipment

| Measurement item        | Product No.   | Manufacturer          |
|-------------------------|---------------|-----------------------|
| L, Q                    | 4291B +16193A | Keysight Technologies |
| Self-resonant frequency | 8720C         | Keysight Technologies |
| DC resistance           | Type-7561     | Yokogawa              |

\* Equivalent measurement equipment may be used.

## MLG1005S type

## CHARACTERISTICS SPECIFICATION TABLE

| L<br>(nH) | Q<br>Tolerance | L, Q measuring<br>frequency<br>min.<br>(MHz) | Self-resonant<br>frequency |           | DC resistance    |                  | Rated current<br>(mA)max. | Part No.* |                                  |
|-----------|----------------|--|----------------------------|-----------|------------------|------------------|---------------------------|-----------|----------------------------------|
|           |                |  | (GHz)min.                  | (GHz)typ. | ( $\Omega$ )max. | ( $\Omega$ )typ. |                           |           |                                  |
| 3.0       | $\pm 0.1$ nH   | 7  | 100                        | 5.5       | 6.8              | 0.2              | 0.09                      | 800       | <a href="#">MLG1005S3N0BT000</a> |
| 3.0       | $\pm 0.2$ nH   | 7  | 100                        | 5.5       | 6.8              | 0.20             | 0.09                      | 800       | <a href="#">MLG1005S3N0CT000</a> |
| 3.0       | $\pm 0.3$ nH   | 7  | 100                        | 5.5       | 6.8              | 0.20             | 0.09                      | 800       | <a href="#">MLG1005S3N0ST000</a> |
| 3.3       | $\pm 0.1$ nH   | 8  | 100                        | 5.0       | 6.1              | 0.20             | 0.09                      | 800       | <a href="#">MLG1005S3N3BT000</a> |
| 3.3       | $\pm 0.2$ nH   | 8  | 100                        | 5.0       | 6.1              | 0.20             | 0.09                      | 800       | <a href="#">MLG1005S3N3CT000</a> |
| 3.3       | $\pm 0.3$ nH   | 8  | 100                        | 5.0       | 6.1              | 0.20             | 0.09                      | 800       | <a href="#">MLG1005S3N3ST000</a> |
| 3.6       | $\pm 0.1$ nH   | 8  | 100                        | 5.0       | 6.7              | 0.20             | 0.09                      | 700       | <a href="#">MLG1005S3N6BT000</a> |
| 3.6       | $\pm 0.2$ nH   | 8  | 100                        | 5.0       | 6.7              | 0.20             | 0.09                      | 700       | <a href="#">MLG1005S3N6CT000</a> |
| 3.6       | $\pm 0.3$ nH   | 8  | 100                        | 5.0       | 6.7              | 0.20             | 0.09                      | 700       | <a href="#">MLG1005S3N6ST000</a> |
| 3.9       | $\pm 0.1$ nH   | 8  | 100                        | 5.0       | 6.5              | 0.20             | 0.11                      | 700       | <a href="#">MLG1005S3N9BT000</a> |
| 3.9       | $\pm 0.2$ nH   | 8  | 100                        | 5.0       | 6.5              | 0.20             | 0.11                      | 700       | <a href="#">MLG1005S3N9CT000</a> |
| 3.9       | $\pm 0.3$ nH   | 8  | 100                        | 5.0       | 6.5              | 0.20             | 0.11                      | 700       | <a href="#">MLG1005S3N9ST000</a> |
| 4.3       | $\pm 0.2$ nH   | 8  | 100                        | 4.5       | 6.0              | 0.20             | 0.11                      | 700       | <a href="#">MLG1005S4N3CT000</a> |
| 4.3       | $\pm 0.3$ nH   | 8  | 100                        | 4.5       | 6.0              | 0.20             | 0.11                      | 700       | <a href="#">MLG1005S4N3ST000</a> |
| 4.7       | $\pm 0.2$ nH   | 8  | 100                        | 4.5       | 5.4              | 0.25             | 0.12                      | 700       | <a href="#">MLG1005S4N7CT000</a> |
| 4.7       | $\pm 0.3$ nH   | 8  | 100                        | 4.5       | 5.4              | 0.25             | 0.12                      | 700       | <a href="#">MLG1005S4N7ST000</a> |
| 5.1       | $\pm 0.2$ nH   | 8  | 100                        | 4.0       | 5.0              | 0.25             | 0.13                      | 600       | <a href="#">MLG1005S5N1CT000</a> |
| 5.1       | $\pm 0.3$ nH   | 8  | 100                        | 4.0       | 5.0              | 0.25             | 0.13                      | 600       | <a href="#">MLG1005S5N1ST000</a> |
| 5.6       | $\pm 0.2$ nH   | 8  | 100                        | 4.0       | 5.3              | 0.25             | 0.14                      | 600       | <a href="#">MLG1005S5N6CT000</a> |
| 5.6       | $\pm 0.3$ nH   | 8  | 100                        | 4.0       | 5.3              | 0.25             | 0.14                      | 600       | <a href="#">MLG1005S5N6ST000</a> |
| 6.2       | $\pm 0.3$ nH   | 8  | 100                        | 4.0       | 4.7              | 0.25             | 0.16                      | 600       | <a href="#">MLG1005S6N2ST000</a> |
| 6.2       | $\pm 3\%$      | 8  | 100                        | 4.0       | 4.7              | 0.25             | 0.16                      | 600       | <a href="#">MLG1005S6N2HT000</a> |
| 6.8       | $\pm 3\%$      | 8  | 100                        | 3.5       | 4.4              | 0.25             | 0.15                      | 600       | <a href="#">MLG1005S6N8HT000</a> |
| 6.8       | $\pm 5\%$      | 8  | 100                        | 3.5       | 4.4              | 0.25             | 0.15                      | 600       | <a href="#">MLG1005S6N8JT000</a> |
| 7.5       | $\pm 3\%$      | 8  | 100                        | 3.0       | 4.1              | 0.25             | 0.15                      | 500       | <a href="#">MLG1005S7N5HT000</a> |
| 7.5       | $\pm 5\%$      | 8  | 100                        | 3.0       | 4.1              | 0.25             | 0.15                      | 500       | <a href="#">MLG1005S7N5JT000</a> |
| 8.2       | $\pm 3\%$      | 8  | 100                        | 3.0       | 4.0              | 0.30             | 0.19                      | 500       | <a href="#">MLG1005S8N2HT000</a> |
| 8.2       | $\pm 5\%$      | 8  | 100                        | 3.0       | 4.0              | 0.30             | 0.19                      | 500       | <a href="#">MLG1005S8N2JT000</a> |
| 9.1       | $\pm 3\%$      | 8  | 100                        | 3.0       | 3.8              | 0.30             | 0.20                      | 500       | <a href="#">MLG1005S9N1HT000</a> |
| 9.1       | $\pm 5\%$      | 8  | 100                        | 3.0       | 3.8              | 0.30             | 0.20                      | 500       | <a href="#">MLG1005S9N1JT000</a> |
| 10        | $\pm 3\%$      | 8  | 100                        | 2.5       | 3.4              | 0.35             | 0.22                      | 500       | <a href="#">MLG1005S10NJT000</a> |
| 10        | $\pm 5\%$      | 8  | 100                        | 2.5       | 3.4              | 0.35             | 0.22                      | 500       | <a href="#">MLG1005S10NJT000</a> |
| 11        | $\pm 3\%$      | 8  | 100                        | 2.5       | 3.5              | 0.40             | 0.28                      | 400       | <a href="#">MLG1005S11NHT000</a> |
| 11        | $\pm 5\%$      | 8  | 100                        | 2.5       | 3.5              | 0.40             | 0.28                      | 400       | <a href="#">MLG1005S11NJT000</a> |
| 12        | $\pm 3\%$      | 8  | 100                        | 2.5       | 3.0              | 0.40             | 0.25                      | 400       | <a href="#">MLG1005S12NHT000</a> |
| 12        | $\pm 5\%$      | 8  | 100                        | 2.5       | 3.0              | 0.40             | 0.25                      | 400       | <a href="#">MLG1005S12NJT000</a> |
| 13        | $\pm 3\%$      | 8  | 100                        | 2.4       | 2.9              | 0.50             | 0.26                      | 400       | <a href="#">MLG1005S13NHT000</a> |
| 13        | $\pm 5\%$      | 8  | 100                        | 2.4       | 2.9              | 0.50             | 0.26                      | 400       | <a href="#">MLG1005S13NJT000</a> |
| 15        | $\pm 3\%$      | 8  | 100                        | 2.2       | 2.8              | 0.55             | 0.35                      | 400       | <a href="#">MLG1005S15NHT000</a> |
| 15        | $\pm 5\%$      | 8  | 100                        | 2.2       | 2.8              | 0.55             | 0.35                      | 400       | <a href="#">MLG1005S15NJT000</a> |
| 16        | $\pm 3\%$      | 8  | 100                        | 2.1       | 2.7              | 0.55             | 0.32                      | 400       | <a href="#">MLG1005S16NHT000</a> |
| 16        | $\pm 5\%$      | 8  | 100                        | 2.1       | 2.7              | 0.55             | 0.32                      | 400       | <a href="#">MLG1005S16NJT000</a> |
| 18        | $\pm 3\%$      | 8  | 100                        | 2.0       | 2.5              | 0.60             | 0.40                      | 350       | <a href="#">MLG1005S18NHT000</a> |
| 18        | $\pm 5\%$      | 8  | 100                        | 2.0       | 2.5              | 0.60             | 0.40                      | 350       | <a href="#">MLG1005S18NJT000</a> |
| 20        | $\pm 3\%$      | 8  | 100                        | 1.9       | 2.4              | 0.60             | 0.38                      | 350       | <a href="#">MLG1005S20NHT000</a> |
| 20        | $\pm 5\%$      | 8  | 100                        | 1.9       | 2.4              | 0.60             | 0.38                      | 350       | <a href="#">MLG1005S20NJT000</a> |
| 22        | $\pm 3\%$      | 8  | 100                        | 1.7       | 2.2              | 0.70             | 0.46                      | 350       | <a href="#">MLG1005S22NHT000</a> |
| 22        | $\pm 5\%$      | 8  | 100                        | 1.7       | 2.2              | 0.70             | 0.46                      | 350       | <a href="#">MLG1005S22NJT000</a> |

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

## Measurement equipment

| Measurement item        | Product No.   | Manufacturer          |
|-------------------------|---------------|-----------------------|
| L, Q                    | 4291B +16193A | Keysight Technologies |
| Self-resonant frequency | 8720C         | Keysight Technologies |
| DC resistance           | Type-7561     | Yokogawa              |

\* Equivalent measurement equipment may be used.

## MLG1005S type

## CHARACTERISTICS SPECIFICATION TABLE

| L<br>(nH) | Q<br>Tolerance | Q<br>min. | L, Q measuring<br>frequency<br>(MHz) | Self-resonant<br>frequency |           | DC resistance    |                  | Rated current<br>(mA)max. | Part No.*                        |
|-----------|----------------|-----------|--------------------------------------|----------------------------|-----------|------------------|------------------|---------------------------|----------------------------------|
|           |                |           |                                      | (GHz)min.                  | (GHz)typ. | ( $\Omega$ )max. | ( $\Omega$ )typ. |                           |                                  |
| 24        | $\pm 3\%$      | 8         | 100                                  | 1.7                        | 2.1       | 0.70             | 0.43             | 350                       | <a href="#">MLG1005S24NHT000</a> |
| 24        | $\pm 5\%$      | 8         | 100                                  | 1.7                        | 2.1       | 0.70             | 0.43             | 350                       | <a href="#">MLG1005S24NJT000</a> |
| 27        | $\pm 3\%$      | 8         | 100                                  | 1.6                        | 2.0       | 0.80             | 0.53             | 300                       | <a href="#">MLG1005S27NHT000</a> |
| 27        | $\pm 5\%$      | 8         | 100                                  | 1.6                        | 2.0       | 0.80             | 0.53             | 300                       | <a href="#">MLG1005S27NJT000</a> |
| 30        | $\pm 3\%$      | 8         | 100                                  | 1.5                        | 1.9       | 0.80             | 0.50             | 300                       | <a href="#">MLG1005S30NHT000</a> |
| 30        | $\pm 5\%$      | 8         | 100                                  | 1.5                        | 1.9       | 0.80             | 0.50             | 300                       | <a href="#">MLG1005S30NJT000</a> |
| 33        | $\pm 3\%$      | 8         | 100                                  | 1.4                        | 1.8       | 0.90             | 0.59             | 300                       | <a href="#">MLG1005S33NHT000</a> |
| 33        | $\pm 5\%$      | 8         | 100                                  | 1.4                        | 1.8       | 0.90             | 0.59             | 300                       | <a href="#">MLG1005S33NJT000</a> |
| 36        | $\pm 3\%$      | 8         | 100                                  | 1.3                        | 1.7       | 1.00             | 0.62             | 250                       | <a href="#">MLG1005S36NHT000</a> |
| 36        | $\pm 5\%$      | 8         | 100                                  | 1.3                        | 1.7       | 1.00             | 0.62             | 250                       | <a href="#">MLG1005S36NJT000</a> |
| 39        | $\pm 3\%$      | 8         | 100                                  | 1.2                        | 1.6       | 1.00             | 0.65             | 250                       | <a href="#">MLG1005S39NHT000</a> |
| 39        | $\pm 5\%$      | 8         | 100                                  | 1.2                        | 1.6       | 1.00             | 0.65             | 250                       | <a href="#">MLG1005S39NJT000</a> |
| 43        | $\pm 3\%$      | 8         | 100                                  | 1.2                        | 1.6       | 1.10             | 0.67             | 250                       | <a href="#">MLG1005S43NHT000</a> |
| 43        | $\pm 5\%$      | 8         | 100                                  | 1.2                        | 1.6       | 1.10             | 0.67             | 250                       | <a href="#">MLG1005S43NJT000</a> |
| 47        | $\pm 3\%$      | 8         | 100                                  | 1.1                        | 1.4       | 1.20             | 0.75             | 250                       | <a href="#">MLG1005S47NHT000</a> |
| 47        | $\pm 5\%$      | 8         | 100                                  | 1.1                        | 1.4       | 1.20             | 0.75             | 250                       | <a href="#">MLG1005S47NJT000</a> |
| 51        | $\pm 3\%$      | 8         | 100                                  | 1.1                        | 1.5       | 1.20             | 0.72             | 250                       | <a href="#">MLG1005S51NHT000</a> |
| 51        | $\pm 5\%$      | 8         | 100                                  | 1.1                        | 1.5       | 1.20             | 0.72             | 250                       | <a href="#">MLG1005S51NJT000</a> |
| 56        | $\pm 3\%$      | 8         | 100                                  | 1.0                        | 1.3       | 1.30             | 0.83             | 200                       | <a href="#">MLG1005S56NHT000</a> |
| 56        | $\pm 5\%$      | 8         | 100                                  | 1.0                        | 1.3       | 1.30             | 0.83             | 200                       | <a href="#">MLG1005S56NJT000</a> |
| 62        | $\pm 3\%$      | 8         | 100                                  | 1.0                        | 1.3       | 1.40             | 0.85             | 200                       | <a href="#">MLG1005S62NHT000</a> |
| 62        | $\pm 5\%$      | 8         | 100                                  | 1.0                        | 1.3       | 1.40             | 0.85             | 200                       | <a href="#">MLG1005S62NJT000</a> |
| 68        | $\pm 3\%$      | 8         | 100                                  | 0.8                        | 1.1       | 1.50             | 0.87             | 200                       | <a href="#">MLG1005S68NHT000</a> |
| 68        | $\pm 5\%$      | 8         | 100                                  | 0.8                        | 1.1       | 1.50             | 0.87             | 200                       | <a href="#">MLG1005S68NJT000</a> |
| 75        | $\pm 3\%$      | 8         | 100                                  | 0.75                       | 1.1       | 1.50             | 0.93             | 200                       | <a href="#">MLG1005S75NHT000</a> |
| 75        | $\pm 5\%$      | 8         | 100                                  | 0.75                       | 1.1       | 1.50             | 0.93             | 200                       | <a href="#">MLG1005S75NJT000</a> |
| 82        | $\pm 3\%$      | 8         | 100                                  | 0.7                        | 1.0       | 1.60             | 1.01             | 200                       | <a href="#">MLG1005S82NHT000</a> |
| 82        | $\pm 5\%$      | 8         | 100                                  | 0.7                        | 1.0       | 1.60             | 1.01             | 200                       | <a href="#">MLG1005S82NJT000</a> |
| 91        | $\pm 3\%$      | 8         | 100                                  | 0.7                        | 0.9       | 1.80             | 1.14             | 200                       | <a href="#">MLG1005S91NHT000</a> |
| 91        | $\pm 5\%$      | 8         | 100                                  | 0.7                        | 0.9       | 1.80             | 1.14             | 200                       | <a href="#">MLG1005S91NJT000</a> |
| 100       | $\pm 3\%$      | 8         | 100                                  | 0.7                        | 0.9       | 2.00             | 1.37             | 200                       | <a href="#">MLG1005SR10HT000</a> |
| 100       | $\pm 5\%$      | 8         | 100                                  | 0.7                        | 0.9       | 2.00             | 1.37             | 200                       | <a href="#">MLG1005SR10JT000</a> |
| 110       | $\pm 3\%$      | 8         | 100                                  | 0.7                        | 0.9       | 2.20             | 1.48             | 150                       | <a href="#">MLG1005SR11HT000</a> |
| 110       | $\pm 5\%$      | 8         | 100                                  | 0.7                        | 0.9       | 2.20             | 1.48             | 150                       | <a href="#">MLG1005SR11JT000</a> |
| 120       | $\pm 3\%$      | 8         | 100                                  | 0.6                        | 0.8       | 2.20             | 1.48             | 150                       | <a href="#">MLG1005SR12HT000</a> |
| 120       | $\pm 5\%$      | 8         | 100                                  | 0.6                        | 0.8       | 2.20             | 1.48             | 150                       | <a href="#">MLG1005SR12JT000</a> |
| 130       | $\pm 3\%$      | 8         | 100                                  | 0.6                        | 0.8       | 2.50             | 1.68             | 150                       | <a href="#">MLG1005SR13HT000</a> |
| 130       | $\pm 5\%$      | 8         | 100                                  | 0.6                        | 0.8       | 2.50             | 1.68             | 150                       | <a href="#">MLG1005SR13JT000</a> |
| 150       | $\pm 3\%$      | 8         | 100                                  | 0.55                       | 0.7       | 3.50             | 2.44             | 150                       | <a href="#">MLG1005SR15HT000</a> |
| 150       | $\pm 5\%$      | 8         | 100                                  | 0.55                       | 0.7       | 3.50             | 2.44             | 150                       | <a href="#">MLG1005SR15JT000</a> |
| 160       | $\pm 3\%$      | 8         | 100                                  | 0.5                        | 0.6       | 3.80             | 2.74             | 150                       | <a href="#">MLG1005SR16HT000</a> |
| 160       | $\pm 5\%$      | 8         | 100                                  | 0.5                        | 0.6       | 3.80             | 2.74             | 150                       | <a href="#">MLG1005SR16JT000</a> |
| 180       | $\pm 3\%$      | 8         | 100                                  | 0.5                        | 0.6       | 3.80             | 2.88             | 150                       | <a href="#">MLG1005SR18HT000</a> |
| 180       | $\pm 5\%$      | 8         | 100                                  | 0.5                        | 0.6       | 3.80             | 2.88             | 150                       | <a href="#">MLG1005SR18JT000</a> |
| 200       | $\pm 3\%$      | 8         | 100                                  | 0.42                       | 0.5       | 4.20             | 3.15             | 100                       | <a href="#">MLG1005SR20HT000</a> |
| 200       | $\pm 5\%$      | 8         | 100                                  | 0.42                       | 0.5       | 4.20             | 3.15             | 100                       | <a href="#">MLG1005SR20JT000</a> |
| 220       | $\pm 3\%$      | 8         | 100                                  | 0.45                       | 0.5       | 4.20             | 3.02             | 100                       | <a href="#">MLG1005SR22HT000</a> |
| 220       | $\pm 5\%$      | 8         | 100                                  | 0.45                       | 0.5       | 4.20             | 3.02             | 100                       | <a href="#">MLG1005SR22JT000</a> |

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

## Measurement equipment

| Measurement item        | Product No.   | Manufacturer          |
|-------------------------|---------------|-----------------------|
| L, Q                    | 4291B +16193A | Keysight Technologies |
| Self-resonant frequency | 8720C         | Keysight Technologies |
| DC resistance           | Type-7561     | Yokogawa              |

\* Equivalent measurement equipment may be used.

# MLG1005S type

## CHARACTERISTICS SPECIFICATION TABLE

| L<br>(nH) | Tolerance | Q<br>min. | L, Q measuring<br>frequency<br>(MHz) | Self-resonant<br>frequency |           | DC resistance    |                  | Rated current<br>(mA)max. | Part No.*                        |
|-----------|-----------|-----------|--------------------------------------|----------------------------|-----------|------------------|------------------|---------------------------|----------------------------------|
|           |           |           |                                      | (GHz)min.                  | (GHz)typ. | ( $\Omega$ )max. | ( $\Omega$ )typ. |                           |                                  |
| 240       | ±3%       | 8         | 100                                  | 0.4                        | 0.5       | 4.8              | 3.42             | 100                       | <a href="#">MLG1005SR24HT000</a> |
| 240       | ±5%       | 8         | 100                                  | 0.4                        | 0.5       | 4.80             | 3.42             | 100                       | <a href="#">MLG1005SR24JT000</a> |
| 270       | ±3%       | 8         | 100                                  | 0.4                        | 0.5       | 4.80             | 3.54             | 100                       | <a href="#">MLG1005SR27HT000</a> |
| 270       | ±5%       | 8         | 100                                  | 0.4                        | 0.5       | 4.80             | 3.54             | 100                       | <a href="#">MLG1005SR27JT000</a> |
| 300       | ±3%       | 6         | 50                                   | 0.35                       | 0.4       | 6.50             | 4.82             | 50                        | <a href="#">MLG1005SR30HT000</a> |
| 300       | ±5%       | 6         | 50                                   | 0.35                       | 0.4       | 6.50             | 4.82             | 50                        | <a href="#">MLG1005SR30JT000</a> |
| 330       | ±3%       | 6         | 50                                   | 0.35                       | 0.4       | 7.00             | 5.21             | 50                        | <a href="#">MLG1005SR33HT000</a> |
| 330       | ±5%       | 6         | 50                                   | 0.35                       | 0.4       | 7.00             | 5.21             | 50                        | <a href="#">MLG1005SR33JT000</a> |
| 360       | ±3%       | 6         | 50                                   | 0.3                        | 0.4       | 7.50             | 5.39             | 50                        | <a href="#">MLG1005SR36HT000</a> |
| 360       | ±5%       | 6         | 50                                   | 0.3                        | 0.4       | 7.50             | 5.39             | 50                        | <a href="#">MLG1005SR36JT000</a> |
| 390       | ±3%       | 6         | 50                                   | 0.3                        | 0.4       | 8.00             | 5.97             | 50                        | <a href="#">MLG1005SR39HT000</a> |
| 390       | ±5%       | 6         | 50                                   | 0.3                        | 0.4       | 8.00             | 5.97             | 50                        | <a href="#">MLG1005SR39JT000</a> |

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

### Measurement equipment

| Measurement item        | Product No.   | Manufacturer          |
|-------------------------|---------------|-----------------------|
| L, Q                    | 4291B +16193A | Keysight Technologies |
| Self-resonant frequency | 8720C         | Keysight Technologies |
| DC resistance           | Type-7561     | Yokogawa              |

\* Equivalent measurement equipment may be used.

## MLG1005S 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 |                                  |
| 0.3       | 0.3    | 0.3    | 0.3    | 0.3    | 22min. | 27min. | 46min. | 49min. | 53min. | <a href="#">MLG1005S0N3BT000</a> |
| 0.3       | 0.3    | 0.3    | 0.3    | 0.3    | 22min. | 27min. | 46min. | 49min. | 53min. | <a href="#">MLG1005S0N3CT000</a> |
| 0.4       | 0.4    | 0.4    | 0.4    | 0.4    | 22min. | 27min. | 46min. | 49min. | 53min. | <a href="#">MLG1005S0N4BT000</a> |
| 0.4       | 0.4    | 0.4    | 0.4    | 0.4    | 22min. | 27min. | 46min. | 49min. | 53min. | <a href="#">MLG1005S0N4CT000</a> |
| 0.5       | 0.5    | 0.5    | 0.5    | 0.5    | 22min. | 27min. | 46min. | 49min. | 53min. | <a href="#">MLG1005S0N5BT000</a> |
| 0.5       | 0.5    | 0.5    | 0.5    | 0.5    | 22min. | 27min. | 46min. | 49min. | 53min. | <a href="#">MLG1005S0N5CT000</a> |
| 0.6       | 0.6    | 0.6    | 0.6    | 0.6    | 22     | 27     | 46     | 49     | 53     | <a href="#">MLG1005S0N6BT000</a> |
| 0.6       | 0.6    | 0.6    | 0.6    | 0.6    | 22     | 27     | 46     | 49     | 53     | <a href="#">MLG1005S0N6CT000</a> |
| 0.7       | 0.7    | 0.7    | 0.7    | 0.7    | 22     | 28     | 45     | 49     | 54     | <a href="#">MLG1005S0N7BT000</a> |
| 0.7       | 0.7    | 0.7    | 0.7    | 0.7    | 22     | 28     | 45     | 49     | 54     | <a href="#">MLG1005S0N7CT000</a> |
| 0.8       | 0.8    | 0.8    | 0.8    | 0.8    | 26     | 34     | 57     | 60     | 66     | <a href="#">MLG1005S0N8BT000</a> |
| 0.8       | 0.8    | 0.8    | 0.8    | 0.8    | 26     | 34     | 57     | 60     | 66     | <a href="#">MLG1005S0N8CT000</a> |
| 0.9       | 0.8    | 0.8    | 0.8    | 0.8    | 21     | 27     | 44     | 47     | 53     | <a href="#">MLG1005S0N9BT000</a> |
| 0.9       | 0.8    | 0.8    | 0.8    | 0.8    | 21     | 27     | 44     | 47     | 53     | <a href="#">MLG1005S0N9CT000</a> |
| 0.9       | 0.9    | 0.9    | 0.9    | 0.9    | 22     | 29     | 48     | 50     | 56     | <a href="#">MLG1005S1N0BT000</a> |
| 0.9       | 0.9    | 0.9    | 0.9    | 0.9    | 22     | 29     | 48     | 50     | 56     | <a href="#">MLG1005S1N0CT000</a> |
| 0.9       | 0.9    | 0.9    | 0.9    | 0.9    | 22     | 29     | 48     | 50     | 56     | <a href="#">MLG1005S1N0ST000</a> |
| 1.0       | 1.0    | 1.0    | 1.0    | 1.0    | 23     | 29     | 47     | 50     | 57     | <a href="#">MLG1005S1N1BT000</a> |
| 1.0       | 1.0    | 1.0    | 1.0    | 1.0    | 23     | 29     | 47     | 50     | 57     | <a href="#">MLG1005S1N1CT000</a> |
| 1.0       | 1.0    | 1.0    | 1.0    | 1.0    | 23     | 29     | 47     | 50     | 57     | <a href="#">MLG1005S1N1ST000</a> |
| 1.1       | 1.1    | 1.1    | 1.1    | 1.1    | 23     | 29     | 48     | 50     | 56     | <a href="#">MLG1005S1N2BT000</a> |
| 1.1       | 1.1    | 1.1    | 1.1    | 1.1    | 23     | 29     | 48     | 50     | 56     | <a href="#">MLG1005S1N2CT000</a> |
| 1.1       | 1.1    | 1.1    | 1.1    | 1.1    | 23     | 29     | 48     | 50     | 56     | <a href="#">MLG1005S1N2ST000</a> |
| 1.2       | 1.2    | 1.2    | 1.2    | 1.2    | 22     | 27     | 44     | 47     | 53     | <a href="#">MLG1005S1N3BT000</a> |
| 1.2       | 1.2    | 1.2    | 1.2    | 1.2    | 22     | 27     | 44     | 47     | 53     | <a href="#">MLG1005S1N3CT000</a> |
| 1.2       | 1.2    | 1.2    | 1.2    | 1.2    | 22     | 27     | 44     | 47     | 53     | <a href="#">MLG1005S1N3ST000</a> |
| 1.4       | 1.4    | 1.4    | 1.5    | 1.5    | 23     | 29     | 47     | 50     | 56     | <a href="#">MLG1005S1N5BT000</a> |
| 1.4       | 1.4    | 1.4    | 1.5    | 1.5    | 23     | 29     | 47     | 50     | 56     | <a href="#">MLG1005S1N5CT000</a> |
| 1.4       | 1.4    | 1.4    | 1.5    | 1.5    | 23     | 29     | 47     | 50     | 56     | <a href="#">MLG1005S1N5ST000</a> |
| 1.5       | 1.5    | 1.5    | 1.6    | 1.6    | 23     | 29     | 46     | 49     | 54     | <a href="#">MLG1005S1N6BT000</a> |
| 1.5       | 1.5    | 1.5    | 1.6    | 1.6    | 23     | 29     | 46     | 49     | 54     | <a href="#">MLG1005S1N6CT000</a> |
| 1.5       | 1.5    | 1.5    | 1.6    | 1.6    | 23     | 29     | 46     | 49     | 54     | <a href="#">MLG1005S1N6ST000</a> |
| 1.7       | 1.7    | 1.7    | 1.7    | 1.7    | 20     | 26     | 41     | 43     | 49     | <a href="#">MLG1005S1N8BT000</a> |
| 1.7       | 1.7    | 1.7    | 1.7    | 1.7    | 20     | 26     | 41     | 43     | 49     | <a href="#">MLG1005S1N8CT000</a> |
| 1.7       | 1.7    | 1.7    | 1.7    | 1.7    | 20     | 26     | 41     | 43     | 49     | <a href="#">MLG1005S1N8ST000</a> |
| 1.9       | 1.9    | 1.9    | 1.9    | 1.9    | 21     | 25     | 41     | 43     | 48     | <a href="#">MLG1005S2N0BT000</a> |
| 1.9       | 1.9    | 1.9    | 1.9    | 1.9    | 21     | 25     | 41     | 43     | 48     | <a href="#">MLG1005S2N0CT000</a> |
| 1.9       | 1.9    | 1.9    | 1.9    | 1.9    | 21     | 25     | 41     | 43     | 48     | <a href="#">MLG1005S2N0ST000</a> |
| 2.1       | 2.1    | 2.1    | 2.1    | 2.2    | 22     | 27     | 44     | 47     | 52     | <a href="#">MLG1005S2N2BT000</a> |
| 2.1       | 2.1    | 2.1    | 2.1    | 2.2    | 22     | 27     | 44     | 47     | 52     | <a href="#">MLG1005S2N2CT000</a> |
| 2.1       | 2.1    | 2.1    | 2.1    | 2.2    | 22     | 27     | 44     | 47     | 52     | <a href="#">MLG1005S2N2ST000</a> |
| 2.3       | 2.3    | 2.3    | 2.3    | 2.4    | 21     | 26     | 42     | 44     | 49     | <a href="#">MLG1005S2N4BT000</a> |
| 2.3       | 2.3    | 2.3    | 2.3    | 2.4    | 21     | 26     | 42     | 44     | 49     | <a href="#">MLG1005S2N4CT000</a> |
| 2.3       | 2.3    | 2.3    | 2.3    | 2.4    | 21     | 26     | 42     | 44     | 49     | <a href="#">MLG1005S2N4ST000</a> |
| 2.6       | 2.6    | 2.6    | 2.7    | 2.7    | 22     | 27     | 43     | 45     | 50     | <a href="#">MLG1005S2N7BT000</a> |
| 2.6       | 2.6    | 2.6    | 2.7    | 2.7    | 22     | 27     | 43     | 45     | 50     | <a href="#">MLG1005S2N7CT000</a> |
| 2.6       | 2.6    | 2.6    | 2.7    | 2.7    | 22     | 27     | 43     | 45     | 50     | <a href="#">MLG1005S2N7ST000</a> |
| 2.9       | 2.9    | 3.0    | 3.0    | 3.1    | 24     | 29     | 47     | 49     | 54     | <a href="#">MLG1005S3N0BT000</a> |
| 2.9       | 2.9    | 3.0    | 3.0    | 3.1    | 24     | 29     | 47     | 49     | 54     | <a href="#">MLG1005S3N0CT000</a> |
| 2.9       | 2.9    | 3.0    | 3.0    | 3.1    | 24     | 29     | 47     | 49     | 54     | <a href="#">MLG1005S3N0ST000</a> |

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

## Measurement equipment

| Product No.   | Manufacturer          |
|---------------|-----------------------|
| 4291B +16193A | Keysight Technologies |

\* Equivalent measurement equipment may be used.

## MLG1005S 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 |                                  |
| 3.2       | 3.2    | 3.3    | 3.4    | 3.5    | 24     | 30     | 46     | 48     | 53     | <a href="#">MLG1005S3N3BT000</a> |
| 3.2       | 3.2    | 3.3    | 3.4    | 3.5    | 24     | 30     | 46     | 48     | 53     | <a href="#">MLG1005S3N3CT000</a> |
| 3.2       | 3.2    | 3.3    | 3.4    | 3.5    | 24     | 30     | 46     | 48     | 53     | <a href="#">MLG1005S3N3ST000</a> |
| 3.4       | 3.4    | 3.6    | 3.6    | 3.8    | 21     | 26     | 40     | 42     | 46     | <a href="#">MLG1005S3N6BT000</a> |
| 3.4       | 3.4    | 3.6    | 3.6    | 3.8    | 21     | 26     | 40     | 42     | 46     | <a href="#">MLG1005S3N6CT000</a> |
| 3.4       | 3.4    | 3.6    | 3.6    | 3.8    | 21     | 26     | 40     | 42     | 46     | <a href="#">MLG1005S3N6ST000</a> |
| 3.7       | 3.7    | 3.9    | 3.9    | 4.1    | 22     | 28     | 43     | 45     | 50     | <a href="#">MLG1005S3N9BT000</a> |
| 3.7       | 3.7    | 3.9    | 3.9    | 4.1    | 22     | 28     | 43     | 45     | 50     | <a href="#">MLG1005S3N9CT000</a> |
| 3.7       | 3.7    | 3.9    | 3.9    | 4.1    | 22     | 28     | 43     | 45     | 50     | <a href="#">MLG1005S3N9ST000</a> |
| 4.1       | 4.1    | 4.3    | 4.4    | 4.6    | 24     | 30     | 47     | 49     | 53     | <a href="#">MLG1005S4N3CT000</a> |
| 4.1       | 4.1    | 4.3    | 4.4    | 4.6    | 24     | 30     | 47     | 49     | 53     | <a href="#">MLG1005S4N3ST000</a> |
| 4.5       | 4.5    | 4.8    | 4.9    | 5.2    | 23     | 30     | 45     | 47     | 50     | <a href="#">MLG1005S4N7CT000</a> |
| 4.5       | 4.5    | 4.8    | 4.9    | 5.2    | 23     | 30     | 45     | 47     | 50     | <a href="#">MLG1005S4N7ST000</a> |
| 4.9       | 4.9    | 5.4    | 5.6    | 6.1    | 23     | 29     | 42     | 43     | 44     | <a href="#">MLG1005S5N1CT000</a> |
| 4.9       | 4.9    | 5.4    | 5.6    | 6.1    | 23     | 29     | 42     | 43     | 44     | <a href="#">MLG1005S5N1ST000</a> |
| 5.4       | 5.4    | 5.8    | 5.9    | 6.3    | 22     | 28     | 42     | 43     | 45     | <a href="#">MLG1005S5N6CT000</a> |
| 5.4       | 5.4    | 5.8    | 5.9    | 6.3    | 22     | 28     | 42     | 43     | 45     | <a href="#">MLG1005S5N6ST000</a> |
| 6.0       | 6.0    | 6.8    | 7.1    | 7.8    | 24     | 29     | 42     | 43     | 43     | <a href="#">MLG1005S6N2HT000</a> |
| 6.0       | 6.0    | 6.8    | 7.1    | 7.8    | 24     | 29     | 42     | 43     | 43     | <a href="#">MLG1005S6N2ST000</a> |
| 6.5       | 6.6    | 7.4    | 7.8    | 8.6    | 23     | 28     | 40     | 41     | 41     | <a href="#">MLG1005S6N8HT000</a> |
| 6.5       | 6.6    | 7.4    | 7.8    | 8.6    | 23     | 28     | 40     | 41     | 41     | <a href="#">MLG1005S6N8JT000</a> |
| 7.2       | 7.4    | 8.6    | 9.2    | 10.5   | 24     | 30     | 41     | 41     | 39     | <a href="#">MLG1005S7N5HT000</a> |
| 7.2       | 7.4    | 8.6    | 9.2    | 10.5   | 24     | 30     | 41     | 41     | 39     | <a href="#">MLG1005S7N5JT000</a> |
| 7.9       | 8.0    | 9.3    | 9.9    | 11.3   | 23     | 28     | 38     | 38     | 36     | <a href="#">MLG1005S8N2HT000</a> |
| 7.9       | 8.0    | 9.3    | 9.9    | 11.3   | 23     | 28     | 38     | 38     | 36     | <a href="#">MLG1005S8N2JT000</a> |
| 8.8       | 9.0    | 10.8   | 11.6   | 13.7   | 24     | 30     | 40     | 39     | 36     | <a href="#">MLG1005S9N1HT000</a> |
| 8.8       | 9.0    | 10.8   | 11.6   | 13.7   | 24     | 30     | 40     | 39     | 36     | <a href="#">MLG1005S9N1JT000</a> |
| 9.7       | 9.9    | 12.4   | 13.5   | 16.7   | 24     | 30     | 37     | 36     | 31     | <a href="#">MLG1005S10NHT000</a> |
| 9.7       | 9.9    | 12.4   | 13.5   | 16.7   | 24     | 30     | 37     | 36     | 31     | <a href="#">MLG1005S10NJT000</a> |
| 10.6      | 10.9   | 13.8   | 15.1   | 19.0   | 23     | 28     | 34     | 33     | 28     | <a href="#">MLG1005S11NHT000</a> |
| 10.6      | 10.9   | 13.8   | 15.1   | 19.0   | 23     | 28     | 34     | 33     | 28     | <a href="#">MLG1005S11NJT000</a> |
| 11.7      | 12.1   | 16.2   | 18.3   |        | 23     | 29     | 33     | 31     |        | <a href="#">MLG1005S12NHT000</a> |
| 11.7      | 12.1   | 16.2   | 18.3   |        | 23     | 29     | 33     | 31     |        | <a href="#">MLG1005S12NJT000</a> |
| 12.6      | 13.0   | 18.3   | 21.3   |        | 20     | 24     | 25     | 22     |        | <a href="#">MLG1005S13NHT000</a> |
| 12.6      | 13     | 18.3   | 21.3   |        | 20     | 24     | 25     | 22     |        | <a href="#">MLG1005S13NJT000</a> |
| 14.7      | 15.3   | 22.0   | 26.0   |        | 23     | 28     | 29     | 26     |        | <a href="#">MLG1005S15NHT000</a> |
| 14.7      | 15.3   | 22.0   | 26.0   |        | 23     | 28     | 29     | 26     |        | <a href="#">MLG1005S15NJT000</a> |
| 15.6      | 16.2   | 24.1   | 29.0   |        | 22     | 26     | 26     | 22     |        | <a href="#">MLG1005S16NHT000</a> |
| 15.6      | 16.2   | 24.1   | 29.0   |        | 22     | 26     | 26     | 22     |        | <a href="#">MLG1005S16NJT000</a> |
| 17.7      | 18.6   | 29.0   |        |        | 23     | 28     | 26     |        |        | <a href="#">MLG1005S18NHT000</a> |
| 17.7      | 18.6   | 29.0   |        |        | 23     | 28     | 26     |        |        | <a href="#">MLG1005S18NJT000</a> |
| 19.7      | 20.8   | 36.8   |        |        | 21     | 25     | 21     |        |        | <a href="#">MLG1005S20NHT000</a> |
| 19.7      | 20.8   | 36.8   |        |        | 21     | 25     | 21     |        |        | <a href="#">MLG1005S20NJT000</a> |
| 21.8      | 23.3   |        |        |        | 22     | 27     |        |        |        | <a href="#">MLG1005S22NHT000</a> |
| 21.8      | 23.3   |        |        |        | 22     | 27     |        |        |        | <a href="#">MLG1005S22NJT000</a> |
| 23.8      | 25.5   |        |        |        | 22     | 26     |        |        |        | <a href="#">MLG1005S24NHT000</a> |
| 23.8      | 25.5   |        |        |        | 22     | 26     |        |        |        | <a href="#">MLG1005S24NJT000</a> |
| 27.0      | 29.6   |        |        |        | 20     | 23     |        |        |        | <a href="#">MLG1005S27NHT000</a> |
| 27.0      | 29.6   |        |        |        | 20     | 23     |        |        |        | <a href="#">MLG1005S27NJT000</a> |

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

## Measurement equipment

| Product No.   | Manufacturer          |
|---------------|-----------------------|
| 4291B +16193A | Keysight Technologies |

\* Equivalent measurement equipment may be used.

## MLG1005S 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                           |
| 30.1      | 33.5   |        |        |        | 19     | 21     |           |        |        | <a href="#">MLG1005S30NHT000</a> |
| 30.1      | 33.5   |        |        |        | 19     | 21     |           |        |        | <a href="#">MLG1005S30NJT000</a> |
| 33.5      | 37.8   |        |        |        | 20     | 23     |           |        |        | <a href="#">MLG1005S33NHT000</a> |
| 33.5      | 37.8   |        |        |        | 20     | 23     |           |        |        | <a href="#">MLG1005S33NJT000</a> |
| 36.7      | 41.5   |        |        |        | 21     | 23     |           |        |        | <a href="#">MLG1005S36NHT000</a> |
| 36.7      | 41.5   |        |        |        | 21     | 23     |           |        |        | <a href="#">MLG1005S36NJT000</a> |
| 40.3      | 46.9   |        |        |        | 20     | 21     |           |        |        | <a href="#">MLG1005S39NHT000</a> |
| 40.3      | 46.9   |        |        |        | 20     | 21     |           |        |        | <a href="#">MLG1005S39NJT000</a> |
| 44.3      | 51.6   |        |        |        | 20     | 21     |           |        |        | <a href="#">MLG1005S43NHT000</a> |
| 44.3      | 51.6   |        |        |        | 20     | 21     |           |        |        | <a href="#">MLG1005S43NJT000</a> |
| 50.2      | 63.2   |        |        |        | 19     | 20     |           |        |        | <a href="#">MLG1005S47NHT000</a> |
| 50.2      | 63.2   |        |        |        | 19     | 20     |           |        |        | <a href="#">MLG1005S47NJT000</a> |
| 53.7      | 65.6   |        |        |        | 19     | 19     |           |        |        | <a href="#">MLG1005S51NHT000</a> |
| 53.7      | 65.6   |        |        |        | 19     | 19     |           |        |        | <a href="#">MLG1005S51NJT000</a> |
| 60.9      | 80.2   |        |        |        | 19     | 18     |           |        |        | <a href="#">MLG1005S56NHT000</a> |
| 60.9      | 80.2   |        |        |        | 19     | 18     |           |        |        | <a href="#">MLG1005S56NJT000</a> |
| 67.5      | 89.8   |        |        |        | 18     | 16     |           |        |        | <a href="#">MLG1005S62NHT000</a> |
| 67.5      | 89.8   |        |        |        | 18     | 16     |           |        |        | <a href="#">MLG1005S62NJT000</a> |
| 75.8      | 107.5  |        |        |        | 17     | 15     |           |        |        | <a href="#">MLG1005S68NHT000</a> |
| 75.8      | 107.5  |        |        |        | 17     | 15     |           |        |        | <a href="#">MLG1005S68NJT000</a> |
| 86.5      | 135.2  |        |        |        | 17     | 13     |           |        |        | <a href="#">MLG1005S75NHT000</a> |
| 86.5      | 135.2  |        |        |        | 17     | 13     |           |        |        | <a href="#">MLG1005S75NJT000</a> |
| 96.9      |        |        |        |        | 16     |        |           |        |        | <a href="#">MLG1005S82NHT000</a> |
| 96.9      |        |        |        |        | 16     |        |           |        |        | <a href="#">MLG1005S82NJT000</a> |
| 111.0     |        |        |        |        | 15     |        |           |        |        | <a href="#">MLG1005S91NHT000</a> |
| 111.0     |        |        |        |        | 15     |        |           |        |        | <a href="#">MLG1005S91NJT000</a> |
| 128.9     |        |        |        |        | 14     |        |           |        |        | <a href="#">MLG1005SR10HT000</a> |
| 128.9     |        |        |        |        | 14     |        |           |        |        | <a href="#">MLG1005SR10JT000</a> |
| 140.8     |        |        |        |        | 15     |        |           |        |        | <a href="#">MLG1005SR11HT000</a> |
| 140.8     |        |        |        |        | 15     |        |           |        |        | <a href="#">MLG1005SR11JT000</a> |
| 175.2     |        |        |        |        | 12     |        |           |        |        | <a href="#">MLG1005SR12HT000</a> |
| 175.2     |        |        |        |        | 12     |        |           |        |        | <a href="#">MLG1005SR12JT000</a> |
| 187.8     |        |        |        |        | 13     |        |           |        |        | <a href="#">MLG1005SR13HT000</a> |
| 187.8     |        |        |        |        | 13     |        |           |        |        | <a href="#">MLG1005SR13JT000</a> |
| 284.7     |        |        |        |        | 11     |        |           |        |        | <a href="#">MLG1005SR15HT000</a> |
| 284.7     |        |        |        |        | 11     |        |           |        |        | <a href="#">MLG1005SR15JT000</a> |
|           |        |        |        |        |        |        |           |        |        | <a href="#">MLG1005SR16HT000</a> |
|           |        |        |        |        |        |        |           |        |        | <a href="#">MLG1005SR16JT000</a> |
|           |        |        |        |        |        |        |           |        |        | <a href="#">MLG1005SR18HT000</a> |
|           |        |        |        |        |        |        |           |        |        | <a href="#">MLG1005SR18JT000</a> |
|           |        |        |        |        |        |        |           |        |        | <a href="#">MLG1005SR20HT000</a> |
|           |        |        |        |        |        |        |           |        |        | <a href="#">MLG1005SR20JT000</a> |
|           |        |        |        |        |        |        |           |        |        | <a href="#">MLG1005SR22HT000</a> |
|           |        |        |        |        |        |        |           |        |        | <a href="#">MLG1005SR22JT000</a> |
|           |        |        |        |        |        |        |           |        |        | <a href="#">MLG1005SR24HT000</a> |
|           |        |        |        |        |        |        |           |        |        | <a href="#">MLG1005SR24JT000</a> |
|           |        |        |        |        |        |        |           |        |        | <a href="#">MLG1005SR27HT000</a> |
|           |        |        |        |        |        |        |           |        |        | <a href="#">MLG1005SR27JT000</a> |
|           |        |        |        |        |        |        |           |        |        | <a href="#">MLG1005SR30HT000</a> |
|           |        |        |        |        |        |        |           |        |        | <a href="#">MLG1005SR30JT000</a> |

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

## Measurement equipment

| Product No.   | Manufacturer          |
|---------------|-----------------------|
| 4291B +16193A | Keysight Technologies |

\* Equivalent measurement equipment may be used.

# MLG1005S 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 |  |  |  |                                  |
|           |        |        |        |        |        |        |           |        |        |  |  |  | <a href="#">MLG1005SR33HT000</a> |
|           |        |        |        |        |        |        |           |        |        |  |  |  | <a href="#">MLG1005SR33JT000</a> |
|           |        |        |        |        |        |        |           |        |        |  |  |  | <a href="#">MLG1005SR36HT000</a> |
|           |        |        |        |        |        |        |           |        |        |  |  |  | <a href="#">MLG1005SR36JT000</a> |
|           |        |        |        |        |        |        |           |        |        |  |  |  | <a href="#">MLG1005SR39HT000</a> |
|           |        |        |        |        |        |        |           |        |        |  |  |  | <a href="#">MLG1005SR39JT000</a> |

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

### Measurement equipment

| Product No.   | Manufacturer          |
|---------------|-----------------------|
| 4291B +16193A | Keysight Technologies |

\* Equivalent measurement equipment may be used.

# MLG1005S type

## ■ L FREQUENCY CHARACTERISTICS (EXAMPLE)



Measurement equipment

| Product No.    | Manufacturer          |
|----------------|-----------------------|
| E4991A +16193A | Keysight Technologies |

\* Equivalent measurement equipment may be used.

# MLG1005S type

## Q FREQUENCY CHARACTERISTICS (EXAMPLE)



Measurement equipment

| Product No.    | Manufacturer          |
|----------------|-----------------------|
| E4991A +16193A | Keysight Technologies |

\* Equivalent measurement equipment may be used.

# MLG1005S type

## SHAPE & DIMENSIONS



## PACKAGING STYLE

### REEL DIMENSIONS



## RECOMMENDED LAND PATTERN



### TAPE DIMENSIONS



## RECOMMENDED REFLOW PROFILE



| Type     | A        | B        | K        |
|----------|----------|----------|----------|
| MLG1005S | 0.62±0.1 | 1.12±0.1 | 0.8 max. |



### PACKAGE QUANTITY

|                  |               |
|------------------|---------------|
| Package quantity | 10000pcs/reel |
|------------------|---------------|

## TEMPERATURE RANGE, INDIVIDUAL WEIGHT

| Operating temperature range | Storage temperature range* | Individual weight |
|-----------------------------|----------------------------|-------------------|
| -55 to +125 °C              | -55 to +125 °C             | 1 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 less than 12 months. Be sure to follow the storage conditions (temperature: 5 to 40°C, humidity: 10 to 75% RH or less).  
If the storage period elapses, the soldering of the terminal electrodes may deteriorate.
- Do not use or store in locations where there are conditions such as gas corrosion (salt, acid, alkali, etc.).
- Before soldering, be sure to preheat components.  
The preheating temperature should be set so that the temperature difference between the solder temperature and chip temperature does not exceed 150°C.
- Soldering corrections after mounting should be within the range of the conditions determined in the specifications.  
If overheated, a short circuit, performance deterioration, or lifespan shortening may occur.
- When embedding a printed circuit board where a chip is mounted to a set, be sure that residual stress is not given to the chip due to the overall distortion of the printed circuit board and partial distortion such as at screw tightening portions.
- Self heating (temperature increase) occurs when the power is turned ON, so the tolerance should be sufficient for the set thermal design.
- Carefully lay out the coil for the circuit board design of the non-magnetic shield type.  
A malfunction may occur due to magnetic interference.
- Use a wrist band to discharge static electricity in your body through the grounding wire.
- Do not expose the products to magnets or magnetic fields.
- Do not use for a purpose outside of the contents regulated in the delivery specifications.
- The products listed on this catalog are intended for use in general electronic equipment (AV equipment, telecommunications equipment, home appliances, amusement equipment, computer equipment, personal equipment, office equipment, measurement equipment, industrial robots) under a normal operation and use condition.  
The products are not designed or warranted to meet the requirements of the applications listed below, whose performance and/or quality require a more stringent level of safety or reliability, or whose failure, malfunction or trouble could cause serious damage to society, person or property.  
If you intend to use the products in the applications listed below or if you have special requirements exceeding the range or conditions set forth in the each catalog, please contact us.



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

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

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

## Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

-  [View MLG1005S4N3CT000](#) on WIN SOURCE
-  [TDK Corporation](#) Information

## Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management