

# SMD Inductors(Coils) For High Frequency(Multilayer)

Conformity to RoHS Directive

## MLG Series MLG1005S Type

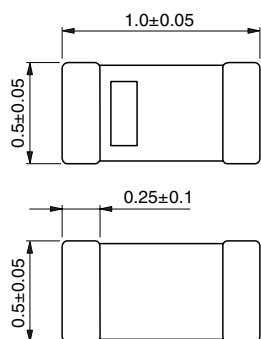
### FEATURES

- Inductance values are supported from 0.3 to 390nH.
- Advanced monolithic structure is formed using a multilayering and sintering process with ceramic and conductive materials for high-frequency.
- The products contain no lead and also support lead-free soldering.
- It is a product conforming to RoHS directive.

### APPLICATIONS

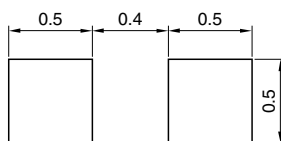
For high-frequency applications including mobile phones, high frequency modules (PA, VCO, FEM etc.), Bluetooth, W-LAN, UWB and tuners.

### SHAPES AND DIMENSIONS



Weight: 1mg

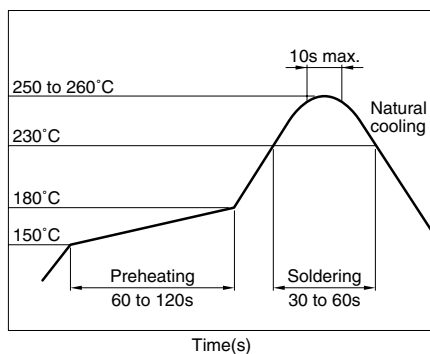
### RECOMMENDED PC BOARD PATTERN



Dimensions in mm



### RECOMMENDED SOLDERING CONDITION REFLOW SOLDERING



- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

- Please contact our Sales office when your application are considered the following:  
The device's failure or malfunction may directly endanger human life (e.g. application for automobile/aircraft/medical/nuclear power devices, etc.)

- All specifications are subject to change without notice.

### PRODUCT IDENTIFICATION

|     |      |     |     |     |     |
|-----|------|-----|-----|-----|-----|
| MLG | 1005 | S   | 2N2 | S   | T   |
| (1) | (2)  | (3) | (4) | (5) | (6) |

(1) Series name

(2) Dimensions

|      |                 |
|------|-----------------|
| 1005 | 1.0×0.5mm (L×W) |
|------|-----------------|

(3) Material code

(4) Inductance value

|     |       |
|-----|-------|
| 2N2 | 2.2nH |
| 12N | 12nH  |
| R10 | 100nH |

(5) Inductance tolerance

|   |        |
|---|--------|
| B | ±0.1nH |
| C | ±0.2nH |
| S | ±0.3nH |
| H | ±3%    |
| J | ±5%    |

(6) Packaging style

|   |               |
|---|---------------|
| T | Taping (reel) |
|---|---------------|

### SPECIFICATIONS

|                             |               |
|-----------------------------|---------------|
| Operating temperature range | -55 to +125°C |
| Storage temperature range   | -55 to +125°C |

### PACKAGING STYLE AND QUANTITIES

|                 |                   |
|-----------------|-------------------|
| Packaging style | Quantity          |
| Taping          | 10000 pieces/reel |

### HANDLING AND PRECAUTIONS

- Before soldering, be sure to preheat components.  
The preheating temperature should be set so that the temperature difference between the solder temperature and product temperature does not exceed 150°C.
- After mounting components onto the printed circuit board, do not apply stress through board bending or mishandling.
- When hand soldering, apply the soldering iron to the printed circuit board only. Temperature of the iron tip should not exceed 350°C. Soldering time should not exceed 3 seconds.

## ELECTRICAL CHARACTERISTICS

| Inductance<br>(nH) | Inductance<br>tolerance                   | Q<br>min. | Test frequency<br>L, Q (MHz) | Self-resonant<br>frequency<br>(GHz) |      | DC resistance<br>( $\Omega$ ) |      | Rated current<br>(mA)max. | Part No.*     |
|--------------------|---|-----------|------------------------------|-------------------------------------|------|-------------------------------|------|---------------------------|---------------|
|                    |   |           |                              | min.                                | typ. | max.                          | typ. |                           |               |
| 0.3                | $\pm 0.1\text{nH}, \pm 0.2\text{nH}$      | —         | 100                          | 10.0                                | 20up | 0.10                          | 0.01 | 1000                      | MLG1005S0N3□T |
| 0.4                | $\pm 0.1\text{nH}, \pm 0.2\text{nH}$      | —         | 100                          | 10.0                                | 20up | 0.10                          | 0.01 | 1000                      | MLG1005S0N4□T |
| 0.5                | $\pm 0.1\text{nH}, \pm 0.2\text{nH}$      | —         | 100                          | 10.0                                | 20up | 0.10                          | 0.01 | 1000                      | MLG1005S0N5□T |
| 0.6                | $\pm 0.1\text{nH}, \pm 0.2\text{nH}$      | —         | 100                          | 10.0                                | 20up | 0.10                          | 0.01 | 1000                      | MLG1005S0N6□T |
| 0.7                | $\pm 0.1\text{nH}, \pm 0.2\text{nH}$      | —         | 100                          | 10.0                                | 18.7 | 0.10                          | 0.02 | 1000                      | MLG1005S0N7□T |
| 0.8                | $\pm 0.1\text{nH}, \pm 0.2\text{nH}$      | —         | 100                          | 10.0                                | 16.4 | 0.10                          | 0.02 | 1000                      | MLG1005S0N8□T |
| 0.9                | $\pm 0.1\text{nH}, \pm 0.2\text{nH}$      | —         | 100                          | 10.0                                | 17.7 | 0.10                          | 0.04 | 1000                      | MLG1005S0N9□T |
| 1.0                | $\pm 0.1\text{nH}, \pm 0.2, 0.3\text{nH}$ | 7         | 100                          | 10.0                                | 13.8 | 0.10                          | 0.04 | 1000                      | MLG1005S1N0□T |
| 1.1                | $\pm 0.1\text{nH}, \pm 0.2, 0.3\text{nH}$ | 7         | 100                          | 10.0                                | 19.3 | 0.10                          | 0.03 | 1000                      | MLG1005S1N1□T |
| 1.2                | $\pm 0.1\text{nH}, \pm 0.2, 0.3\text{nH}$ | 7         | 100                          | 10.0                                | 11.6 | 0.10                          | 0.04 | 1000                      | MLG1005S1N2□T |
| 1.3                | $\pm 0.1\text{nH}, \pm 0.2, 0.3\text{nH}$ | 7         | 100                          | 8.00                                | 11.7 | 0.10                          | 0.04 | 1000                      | MLG1005S1N3□T |
| 1.5                | $\pm 0.1\text{nH}, \pm 0.2, 0.3\text{nH}$ | 7         | 100                          | 8.00                                | 9.6  | 0.10                          | 0.06 | 1000                      | MLG1005S1N5□T |
| 1.6                | $\pm 0.1\text{nH}, \pm 0.2, 0.3\text{nH}$ | 7         | 100                          | 7.50                                | 9.4  | 0.12                          | 0.05 | 1000                      | MLG1005S1N6□T |
| 1.8                | $\pm 0.1\text{nH}, \pm 0.2, 0.3\text{nH}$ | 7         | 100                          | 8.00                                | 10.3 | 0.15                          | 0.06 | 900                       | MLG1005S1N8□T |
| 2.0                | $\pm 0.1\text{nH}, \pm 0.2, 0.3\text{nH}$ | 7         | 100                          | 7.50                                | 9.3  | 0.15                          | 0.07 | 900                       | MLG1005S2N0□T |
| 2.2                | $\pm 0.1\text{nH}, \pm 0.2, 0.3\text{nH}$ | 7         | 100                          | 7.00                                | 8.6  | 0.15                          | 0.08 | 900                       | MLG1005S2N2□T |
| 2.4                | $\pm 0.1\text{nH}, \pm 0.2, 0.3\text{nH}$ | 7         | 100                          | 7.00                                | 8.2  | 0.15                          | 0.08 | 800                       | MLG1005S2N4□T |
| 2.7                | $\pm 0.1\text{nH}, \pm 0.2, 0.3\text{nH}$ | 7         | 100                          | 6.00                                | 7.3  | 0.15                          | 0.08 | 800                       | MLG1005S2N7□T |
| 3.0                | $\pm 0.1\text{nH}, \pm 0.2, 0.3\text{nH}$ | 7         | 100                          | 5.50                                | 6.8  | 0.20                          | 0.09 | 800                       | MLG1005S3N0□T |
| 3.3                | $\pm 0.1\text{nH}, \pm 0.2, 0.3\text{nH}$ | 8         | 100                          | 5.00                                | 6.1  | 0.20                          | 0.09 | 800                       | MLG1005S3N3□T |
| 3.6                | $\pm 0.1\text{nH}, \pm 0.2, 0.3\text{nH}$ | 8         | 100                          | 5.00                                | 6.7  | 0.20                          | 0.09 | 700                       | MLG1005S3N6□T |
| 3.9                | $\pm 0.1\text{nH}, \pm 0.2, 0.3\text{nH}$ | 8         | 100                          | 5.00                                | 6.5  | 0.20                          | 0.11 | 700                       | MLG1005S3N9□T |
| 4.3                | $\pm 0.2\text{nH}, \pm 0.3\text{nH}$      | 8         | 100                          | 4.50                                | 6.0  | 0.20                          | 0.11 | 700                       | MLG1005S4N3□T |
| 4.7                | $\pm 0.2\text{nH}, \pm 0.3\text{nH}$      | 8         | 100                          | 4.50                                | 5.4  | 0.25                          | 0.12 | 700                       | MLG1005S4N7□T |
| 5.1                | $\pm 0.2\text{nH}, \pm 0.3\text{nH}$      | 8         | 100                          | 4.00                                | 5.0  | 0.25                          | 0.13 | 600                       | MLG1005S5N1□T |
| 5.6                | $\pm 0.2\text{nH}, \pm 0.3\text{nH}$      | 8         | 100                          | 4.00                                | 5.3  | 0.25                          | 0.14 | 600                       | MLG1005S5N6□T |
| 6.2                | $\pm 3\%, \pm 0.3\text{nH}$               | 8         | 100                          | 4.00                                | 4.7  | 0.25                          | 0.16 | 600                       | MLG1005S6N2□T |
| 6.8                | $\pm 3\%, \pm 5\%$                        | 8         | 100                          | 3.50                                | 4.4  | 0.25                          | 0.15 | 600                       | MLG1005S6N8□T |
| 7.5                | $\pm 3\%, \pm 5\%$                        | 8         | 100                          | 3.00                                | 4.1  | 0.25                          | 0.15 | 500                       | MLG1005S7N5□T |
| 8.2                | $\pm 3\%, \pm 5\%$                        | 8         | 100                          | 3.00                                | 4.0  | 0.30                          | 0.19 | 500                       | MLG1005S8N2□T |
| 9.1                | $\pm 3\%, \pm 5\%$                        | 8         | 100                          | 3.00                                | 3.8  | 0.30                          | 0.20 | 500                       | MLG1005S9N1□T |
| 10                 | $\pm 3\%, \pm 5\%$                        | 8         | 100                          | 2.50                                | 3.4  | 0.35                          | 0.22 | 500                       | MLG1005S10N□T |
| 11                 | $\pm 3\%, \pm 5\%$                        | 8         | 100                          | 2.50                                | 3.5  | 0.40                          | 0.28 | 400                       | MLG1005S11N□T |
| 12                 | $\pm 3\%, \pm 5\%$                        | 8         | 100                          | 2.50                                | 3.0  | 0.40                          | 0.25 | 400                       | MLG1005S12N□T |
| 13                 | $\pm 3\%, \pm 5\%$                        | 8         | 100                          | 2.40                                | 2.9  | 0.50                          | 0.26 | 400                       | MLG1005S13N□T |
| 15                 | $\pm 3\%, \pm 5\%$                        | 8         | 100                          | 2.20                                | 2.8  | 0.55                          | 0.35 | 400                       | MLG1005S15N□T |
| 16                 | $\pm 3\%, \pm 5\%$                        | 8         | 100                          | 2.10                                | 2.7  | 0.55                          | 0.32 | 400                       | MLG1005S16N□T |
| 18                 | $\pm 3\%, \pm 5\%$                        | 8         | 100                          | 2.00                                | 2.5  | 0.60                          | 0.40 | 350                       | MLG1005S18N□T |
| 20                 | $\pm 3\%, \pm 5\%$                        | 8         | 100                          | 1.90                                | 2.4  | 0.60                          | 0.38 | 350                       | MLG1005S20N□T |
| 22                 | $\pm 3\%, \pm 5\%$                        | 8         | 100                          | 1.70                                | 2.2  | 0.70                          | 0.46 | 350                       | MLG1005S22N□T |
| 24                 | $\pm 3\%, \pm 5\%$                        | 8         | 100                          | 1.70                                | 2.1  | 0.70                          | 0.43 | 350                       | MLG1005S24N□T |
| 27                 | $\pm 3\%, \pm 5\%$                        | 8         | 100                          | 1.60                                | 2.0  | 0.80                          | 0.53 | 300                       | MLG1005S27N□T |
| 30                 | $\pm 3\%, \pm 5\%$                        | 8         | 100                          | 1.50                                | 1.9  | 0.80                          | 0.50 | 300                       | MLG1005S30N□T |
| 33                 | $\pm 3\%, \pm 5\%$                        | 8         | 100                          | 1.40                                | 1.8  | 0.90                          | 0.59 | 300                       | MLG1005S33N□T |
| 36                 | $\pm 3\%, \pm 5\%$                        | 8         | 100                          | 1.30                                | 1.7  | 1.00                          | 0.62 | 250                       | MLG1005S36N□T |
| 39                 | $\pm 3\%, \pm 5\%$                        | 8         | 100                          | 1.20                                | 1.6  | 1.00                          | 0.65 | 250                       | MLG1005S39N□T |
| 43                 | $\pm 3\%, \pm 5\%$                        | 8         | 100                          | 1.20                                | 1.6  | 1.10                          | 0.67 | 250                       | MLG1005S43N□T |
| 47                 | $\pm 3\%, \pm 5\%$                        | 8         | 100                          | 1.10                                | 1.4  | 1.20                          | 0.75 | 250                       | MLG1005S47N□T |
| 51                 | $\pm 3\%, \pm 5\%$                        | 8         | 100                          | 1.10                                | 1.5  | 1.20                          | 0.72 | 250                       | MLG1005S51N□T |
| 56                 | $\pm 3\%, \pm 5\%$                        | 8         | 100                          | 1.00                                | 1.3  | 1.30                          | 0.83 | 200                       | MLG1005S56N□T |
| 62                 | $\pm 3\%, \pm 5\%$                        | 8         | 100                          | 1.00                                | 1.3  | 1.40                          | 0.85 | 200                       | MLG1005S62N□T |
| 68                 | $\pm 3\%, \pm 5\%$                        | 8         | 100                          | 0.80                                | 1.1  | 1.50                          | 0.87 | 200                       | MLG1005S68N□T |
| 75                 | $\pm 3\%, \pm 5\%$                        | 8         | 100                          | 0.75                                | 1.1  | 1.50                          | 0.93 | 200                       | MLG1005S75N□T |
| 82                 | $\pm 3\%, \pm 5\%$                        | 8         | 100                          | 0.70                                | 1.0  | 1.60                          | 1.01 | 200                       | MLG1005S82N□T |
| 91                 | $\pm 3\%, \pm 5\%$                        | 8         | 100                          | 0.70                                | 0.9  | 1.80                          | 1.14 | 200                       | MLG1005S91N□T |

\* □: Please specify inductance tolerance, (B $\pm 0.1\text{nH}$ ), (C $\pm 0.2\text{nH}$ ), (S $\pm 0.3\text{nH}$ ), (H $\pm 3\%$ ) or (J $\pm 5\%$ ).

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

• Test equipment

Inductance Q : HP4291A+16193A, or equivalent

SRF: HP8720C, or equivalent

Rdc: YOKOGAWA TYPE7561, or equivalent

• All specifications are subject to change without notice.

**ELECTRICAL CHARACTERISTICS**

| Inductance<br>(nH) | Inductance<br>tolerance | Q<br>min. | Test frequency<br>L, Q (MHz) | Self-resonant<br>frequency<br>(GHz) |      | DC resistance<br>( $\Omega$ ) |      | Rated current<br>(mA)max. | Part No.*     |
|--------------------|-------------------------|-----------|------------------------------|-------------------------------------|------|-------------------------------|------|---------------------------|---------------|
|                    |                         |           |                              | min.                                | typ. | max.                          | typ. |                           |               |
| 100                | $\pm 3\%$ , $\pm 5\%$   | 8         | 100                          | 0.70                                | 0.9  | 2.00                          | 1.37 | 200                       | MLG1005SR10□T |
| 110                | $\pm 3\%$ , $\pm 5\%$   | 8         | 100                          | 0.70                                | 0.9  | 2.20                          | 1.48 | 150                       | MLG1005SR11□T |
| 120                | $\pm 3\%$ , $\pm 5\%$   | 8         | 100                          | 0.60                                | 0.8  | 2.20                          | 1.48 | 150                       | MLG1005SR12□T |
| 130                | $\pm 3\%$ , $\pm 5\%$   | 8         | 100                          | 0.60                                | 0.8  | 2.50                          | 1.68 | 150                       | MLG1005SR13□T |
| 150                | $\pm 3\%$ , $\pm 5\%$   | 8         | 100                          | 0.55                                | 0.7  | 3.50                          | 2.44 | 150                       | MLG1005SR15□T |
| 160                | $\pm 3\%$ , $\pm 5\%$   | 8         | 100                          | 0.50                                | 0.6  | 3.80                          | 2.74 | 150                       | MLG1005SR16□T |
| 180                | $\pm 3\%$ , $\pm 5\%$   | 8         | 100                          | 0.50                                | 0.6  | 3.80                          | 2.88 | 150                       | MLG1005SR18□T |
| 200                | $\pm 3\%$ , $\pm 5\%$   | 8         | 100                          | 0.42                                | 0.5  | 4.20                          | 3.15 | 100                       | MLG1005SR20□T |
| 220                | $\pm 3\%$ , $\pm 5\%$   | 8         | 100                          | 0.45                                | 0.5  | 4.20                          | 3.02 | 100                       | MLG1005SR22□T |
| 240                | $\pm 3\%$ , $\pm 5\%$   | 8         | 100                          | 0.40                                | 0.5  | 4.80                          | 3.42 | 100                       | MLG1005SR24□T |
| 270                | $\pm 3\%$ , $\pm 5\%$   | 8         | 100                          | 0.40                                | 0.5  | 4.80                          | 3.54 | 100                       | MLG1005SR27□T |
| 300                | $\pm 3\%$ , $\pm 5\%$   | 6         | 50                           | 0.35                                | 0.4  | 6.50                          | 4.82 | 50                        | MLG1005SR30□T |
| 330                | $\pm 3\%$ , $\pm 5\%$   | 6         | 50                           | 0.35                                | 0.4  | 7.00                          | 5.21 | 50                        | MLG1005SR33□T |
| 360                | $\pm 3\%$ , $\pm 5\%$   | 6         | 50                           | 0.30                                | 0.4  | 7.50                          | 5.39 | 50                        | MLG1005SR36□T |
| 390                | $\pm 3\%$ , $\pm 5\%$   | 6         | 50                           | 0.30                                | 0.4  | 8.00                          | 5.97 | 50                        | MLG1005SR39□T |

\* □: Please specify inductance tolerance, (B $\pm$ 0.1nH), (C $\pm$ 0.2nH), (S $\pm$ 0.3nH), (H $\pm$ 3%) or (J $\pm$ 5%).

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

• Test equipment

Inductance Q : HP4291A+16193A, or equivalent

SRF: HP8720C, or equivalent

Rdc: YOKOGAWA TYPE7561, or equivalent

**L, Q vs. FREQUENCY CHARACTERISTICS**

| Part No.    | Inductance(nH)typ. |        |        |        |        | Q typ. |        |        |        |        |
|-------------|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|             | 500MHz             | 800MHz | 1.8GHz | 2.0GHz | 2.4GHz | 500MHz | 800MHz | 1.8GHz | 2.0GHz | 2.4GHz |
| MLG1005S0N3 | 0.3                | 0.3    | 0.3    | 0.3    | 0.3    | 39     | 48     | 99     | 117    | 127    |
| MLG1005S0N4 | 0.4                | 0.4    | 0.4    | 0.4    | 0.4    | 41     | 48     | 98     | 109    | 117    |
| MLG1005S0N5 | 0.5                | 0.5    | 0.5    | 0.5    | 0.5    | 26     | 32     | 58     | 63     | 69     |
| MLG1005S0N6 | 0.6                | 0.6    | 0.6    | 0.6    | 0.6    | 22     | 27     | 46     | 49     | 53     |
| MLG1005S0N7 | 0.7                | 0.7    | 0.7    | 0.7    | 0.7    | 22     | 28     | 45     | 49     | 54     |
| MLG1005S0N8 | 0.8                | 0.8    | 0.8    | 0.8    | 0.8    | 26     | 34     | 57     | 60     | 66     |
| MLG1005S0N9 | 0.9                | 0.8    | 0.8    | 0.8    | 0.8    | 21     | 27     | 44     | 47     | 53     |
| MLG1005S1N0 | 0.9                | 0.9    | 0.9    | 0.9    | 0.9    | 22     | 29     | 48     | 50     | 56     |
| MLG1005S1N1 | 1.0                | 1.0    | 1.0    | 1.0    | 1.0    | 23     | 29     | 47     | 50     | 57     |
| MLG1005S1N2 | 1.1                | 1.1    | 1.1    | 1.1    | 1.1    | 23     | 29     | 48     | 50     | 56     |
| MLG1005S1N3 | 1.2                | 1.2    | 1.2    | 1.2    | 1.2    | 22     | 27     | 44     | 47     | 53     |
| MLG1005S1N5 | 1.4                | 1.4    | 1.4    | 1.5    | 1.5    | 23     | 29     | 47     | 50     | 56     |
| MLG1005S1N6 | 1.5                | 1.5    | 1.5    | 1.6    | 1.6    | 23     | 29     | 46     | 49     | 54     |
| MLG1005S1N8 | 1.7                | 1.7    | 1.7    | 1.7    | 1.7    | 20     | 26     | 41     | 43     | 49     |
| MLG1005S2N0 | 1.9                | 1.9    | 1.9    | 1.9    | 1.9    | 21     | 25     | 41     | 43     | 48     |
| MLG1005S2N2 | 2.1                | 2.1    | 2.1    | 2.1    | 2.2    | 22     | 27     | 44     | 47     | 52     |
| MLG1005S2N4 | 2.3                | 2.3    | 2.3    | 2.3    | 2.4    | 21     | 26     | 42     | 44     | 49     |
| MLG1005S2N7 | 2.6                | 2.6    | 2.6    | 2.7    | 2.7    | 22     | 27     | 43     | 45     | 50     |
| MLG1005S3N0 | 2.9                | 2.9    | 3.0    | 3.0    | 3.1    | 24     | 29     | 47     | 49     | 54     |
| MLG1005S3N3 | 3.2                | 3.2    | 3.3    | 3.4    | 3.5    | 24     | 30     | 46     | 48     | 53     |
| MLG1005S3N6 | 3.4                | 3.4    | 3.6    | 3.6    | 3.8    | 21     | 26     | 40     | 42     | 46     |
| MLG1005S3N9 | 3.7                | 3.7    | 3.9    | 3.9    | 4.1    | 22     | 28     | 43     | 45     | 50     |
| MLG1005S4N3 | 4.1                | 4.1    | 4.3    | 4.4    | 4.6    | 24     | 30     | 47     | 49     | 53     |
| MLG1005S4N7 | 4.5                | 4.5    | 4.8    | 4.9    | 5.2    | 23     | 30     | 45     | 47     | 50     |
| MLG1005S5N1 | 4.9                | 4.9    | 5.4    | 5.6    | 6.1    | 23     | 29     | 42     | 43     | 44     |
| MLG1005S5N6 | 5.4                | 5.4    | 5.8    | 5.9    | 6.3    | 22     | 28     | 42     | 43     | 45     |
| MLG1005S6N2 | 6.0                | 6.0    | 6.8    | 7.1    | 7.8    | 24     | 29     | 42     | 43     | 43     |
| MLG1005S6N8 | 6.5                | 6.6    | 7.4    | 7.8    | 8.6    | 23     | 28     | 40     | 41     | 41     |
| MLG1005S7N5 | 7.2                | 7.4    | 8.6    | 9.2    | 10.5   | 24     | 30     | 41     | 41     | 39     |
| MLG1005S8N2 | 7.9                | 8.0    | 9.3    | 9.9    | 11.3   | 23     | 28     | 38     | 38     | 36     |
| MLG1005S9N1 | 8.8                | 9.0    | 10.8   | 11.6   | 13.7   | 24     | 30     | 40     | 39     | 36     |
| MLG1005S10N | 9.7                | 9.9    | 12.4   | 13.5   | 16.7   | 24     | 30     | 37     | 36     | 31     |
| MLG1005S11N | 10.6               | 10.9   | 13.8   | 15.1   | 19.0   | 23     | 28     | 34     | 33     | 28     |
| MLG1005S12N | 11.7               | 12.1   | 16.2   | 18.3   | 25.5   | 23     | 29     | 33     | 31     | 23     |
| MLG1005S13N | 12.6               | 13.0   | 18.3   | 21.3   | 32.4   | 20     | 24     | 25     | 22     | 15     |
| MLG1005S15N | 14.7               | 15.3   | 22.0   | 26.0   | 41.7   | 23     | 28     | 29     | 26     | 17     |
| MLG1005S16N | 15.6               | 16.2   | 24.1   | 29.0   | 50.2   | 22     | 26     | 26     | 22     | 13     |
| MLG1005S18N | 17.7               | 18.6   | 29.0   | 36.1   | 74.4   | 23     | 28     | 26     | 22     | 11     |
| MLG1005S20N | 19.7               | 20.8   | 36.8   | 50.3   | 215.3  | 21     | 25     | 21     | 16     | 4      |
| MLG1005S22N | 21.8               | 23.3   | 44.5   | 65.1   | 341.5  | 22     | 27     | 21     | 14     | 2      |
| MLG1005S24N | 23.8               | 25.5   | 53.8   | 86.9   |        | 22     | 26     | 17     | 11     | 3      |
| MLG1005S27N | 27.0               | 29.6   | 92.4   | 317.8  |        | 20     | 23     | 10     | 3      |        |
| MLG1005S30N | 30.1               | 33.5   | 150.1  |        |        | 19     | 21     | 6      | 1      |        |
| MLG1005S33N | 33.5               | 37.8   | 314.7  |        |        | 20     | 23     | 3      |        |        |
| MLG1005S36N | 36.7               | 41.5   |        |        |        | 21     | 23     | 2      |        |        |
| MLG1005S39N | 40.3               | 46.9   |        |        |        | 20     | 21     |        |        |        |
| MLG1005S43N | 44.3               | 51.6   |        |        |        | 20     | 21     |        |        |        |
| MLG1005S47N | 50.2               | 63.2   |        |        |        | 19     | 20     |        |        |        |
| MLG1005S51N | 53.7               | 65.6   |        |        |        | 19     | 19     |        |        |        |
| MLG1005S56N | 60.9               | 80.2   |        |        |        | 19     | 18     |        |        |        |
| MLG1005S62N | 67.5               | 89.8   |        |        |        | 18     | 16     |        |        |        |
| MLG1005S68N | 75.8               | 107.5  |        |        |        | 17     | 15     |        |        |        |
| MLG1005S75N | 86.5               | 135.2  |        |        |        | 17     | 13     |        |        |        |
| MLG1005S82N | 96.9               | 164.8  |        |        |        | 16     | 11     |        |        |        |
| MLG1005S91N | 111.0              | 217.9  |        |        |        | 15     | 9      |        |        |        |
| MLG1005SR10 | 128.9              | 325.8  |        |        |        | 14     | 6      |        |        |        |
| MLG1005SR11 | 140.8              | 343.1  |        |        |        | 15     | 7      |        |        |        |
| MLG1005SR12 | 175.2              |        |        |        |        | 12     | 1      |        |        |        |
| MLG1005SR13 | 187.8              |        |        |        |        | 13     | 2      |        |        |        |
| MLG1005SR15 | 284.7              |        |        |        |        | 11     |        |        |        |        |
| MLG1005SR16 | 356.9              |        |        |        |        | 9      |        |        |        |        |
| MLG1005SR18 | 422.4              |        |        |        |        | 8      |        |        |        |        |
| MLG1005SR20 |                    |        |        |        |        | 4      |        |        |        |        |
| MLG1005SR22 |                    |        |        |        |        | 5      |        |        |        |        |
| MLG1005SR24 |                    |        |        |        |        | 1      |        |        |        |        |
| MLG1005SR27 |                    |        |        |        |        |        |        |        |        |        |
| MLG1005SR30 |                    |        |        |        |        |        |        |        |        |        |
| MLG1005SR33 |                    |        |        |        |        |        |        |        |        |        |
| MLG1005SR36 |                    |        |        |        |        |        |        |        |        |        |
| MLG1005SR39 |                    |        |        |        |        |        |        |        |        |        |

• All specifications are subject to change without notice.

