

Inductors for high frequency circuits  
Multilayer ceramic  
MHQ-P series



## MHQ1005P type



### FEATURES

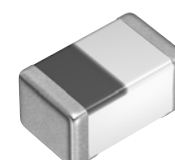
- Unique ceramic material and configuration allows for the realization of high Q characteristics that are equivalent to that of air core wound inductors.
- Multilayer method allows for a lineup with fine increments of inductance.
- Operating temperature range: -55 to +125°C

### 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

|             |                                    |                 |                    |                         |                 |               |
|-------------|------------------------------------|-----------------|--------------------|-------------------------|-----------------|---------------|
| MHQ         | 1005                               | P               | 0N7                | B                       | T               | 000           |
| Series name | LxWxH dimensions<br>1.0x0.6x0.5 mm | Characteristics | Inductance<br>(nH) | Inductance<br>tolerance | Packaging style | Internal code |



## MHQ1005P type

## CHARACTERISTICS SPECIFICATION TABLE

| L<br>(nH) | Tolerance    | L measuring<br>frequency<br>(MHz) | Q<br>min. | 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. |                           |                                  |
| 0.7       | $\pm 0.1$ nH | 100                               | —         | 250                               | 15.0                       | 18.3      | 0.03             | 0.01             | 1200                      | <a href="#">MHQ1005P0N7BT000</a> |
| 0.7       | $\pm 0.2$ nH | 100                               | —         | 250                               | 15.0                       | 18.3      | 0.03             | 0.01             | 1200                      | <a href="#">MHQ1005P0N7CT000</a> |
| 0.8       | $\pm 0.1$ nH | 100                               | —         | 250                               | 15.0                       | 18.3      | 0.03             | 0.01             | 1200                      | <a href="#">MHQ1005P0N8BT000</a> |
| 0.8       | $\pm 0.2$ nH | 100                               | —         | 250                               | 15.0                       | 18.3      | 0.03             | 0.01             | 1200                      | <a href="#">MHQ1005P0N8CT000</a> |
| 0.9       | $\pm 0.1$ nH | 100                               | —         | 250                               | 15.0                       | 18.6      | 0.03             | 0.01             | 1200                      | <a href="#">MHQ1005P0N9BT000</a> |
| 0.9       | $\pm 0.2$ nH | 100                               | —         | 250                               | 15.0                       | 18.6      | 0.03             | 0.01             | 1200                      | <a href="#">MHQ1005P0N9CT000</a> |
| 1.0       | $\pm 0.1$ nH | 100                               | —         | 250                               | 15.0                       | 20.0      | 0.03             | 0.01             | 1200                      | <a href="#">MHQ1005P1N0BT000</a> |
| 1.0       | $\pm 0.2$ nH | 100                               | —         | 250                               | 15.0                       | 20.0      | 0.03             | 0.01             | 1200                      | <a href="#">MHQ1005P1N0CT000</a> |
| 1.0       | $\pm 0.3$ nH | 100                               | —         | 250                               | 15.0                       | 20.0      | 0.03             | 0.01             | 1200                      | <a href="#">MHQ1005P1N0ST000</a> |
| 1.1       | $\pm 0.1$ nH | 100                               | —         | 250                               | 14.0                       | 20.0      | 0.03             | 0.02             | 1200                      | <a href="#">MHQ1005P1N1BT000</a> |
| 1.1       | $\pm 0.2$ nH | 100                               | —         | 250                               | 14.0                       | 20.0      | 0.03             | 0.02             | 1200                      | <a href="#">MHQ1005P1N1CT000</a> |
| 1.1       | $\pm 0.3$ nH | 100                               | —         | 250                               | 14.0                       | 20.0      | 0.03             | 0.02             | 1200                      | <a href="#">MHQ1005P1N1ST000</a> |
| 1.2       | $\pm 0.1$ nH | 100                               | —         | 250                               | 13.0                       | 20.0      | 0.03             | 0.01             | 1200                      | <a href="#">MHQ1005P1N2BT000</a> |
| 1.2       | $\pm 0.2$ nH | 100                               | —         | 250                               | 13.0                       | 20.0      | 0.03             | 0.01             | 1200                      | <a href="#">MHQ1005P1N2CT000</a> |
| 1.2       | $\pm 0.3$ nH | 100                               | —         | 250                               | 13.0                       | 20.0      | 0.03             | 0.01             | 1200                      | <a href="#">MHQ1005P1N2ST000</a> |
| 1.3       | $\pm 0.1$ nH | 100                               | —         | 250                               | 12.0                       | 20.0      | 0.03             | 0.01             | 1200                      | <a href="#">MHQ1005P1N3BT000</a> |
| 1.3       | $\pm 0.2$ nH | 100                               | —         | 250                               | 12.0                       | 20.0      | 0.03             | 0.01             | 1200                      | <a href="#">MHQ1005P1N3CT000</a> |
| 1.3       | $\pm 0.3$ nH | 100                               | —         | 250                               | 12.0                       | 20.0      | 0.03             | 0.01             | 1200                      | <a href="#">MHQ1005P1N3ST000</a> |
| 1.4       | $\pm 0.1$ nH | 100                               | 23        | 250                               | 12.0                       | 20.0      | 0.04             | 0.02             | 1000                      | <a href="#">MHQ1005P1N4BT000</a> |
| 1.4       | $\pm 0.2$ nH | 100                               | 23        | 250                               | 12.0                       | 20.0      | 0.04             | 0.02             | 1000                      | <a href="#">MHQ1005P1N4CT000</a> |
| 1.4       | $\pm 0.3$ nH | 100                               | 23        | 250                               | 12.0                       | 20.0      | 0.04             | 0.02             | 1000                      | <a href="#">MHQ1005P1N4ST000</a> |
| 1.5       | $\pm 0.1$ nH | 100                               | 23        | 250                               | 11.0                       | 19.7      | 0.04             | 0.02             | 1000                      | <a href="#">MHQ1005P1N5BT000</a> |
| 1.5       | $\pm 0.2$ nH | 100                               | 23        | 250                               | 11.0                       | 19.7      | 0.04             | 0.02             | 1000                      | <a href="#">MHQ1005P1N5CT000</a> |
| 1.5       | $\pm 0.3$ nH | 100                               | 23        | 250                               | 11.0                       | 19.7      | 0.04             | 0.02             | 1000                      | <a href="#">MHQ1005P1N5ST000</a> |
| 1.6       | $\pm 0.1$ nH | 100                               | 23        | 250                               | 10.0                       | 15.2      | 0.04             | 0.02             | 1000                      | <a href="#">MHQ1005P1N6BT000</a> |
| 1.6       | $\pm 0.2$ nH | 100                               | 23        | 250                               | 10.0                       | 15.2      | 0.04             | 0.02             | 1000                      | <a href="#">MHQ1005P1N6CT000</a> |
| 1.6       | $\pm 0.3$ nH | 100                               | 23        | 250                               | 10.0                       | 15.2      | 0.04             | 0.02             | 1000                      | <a href="#">MHQ1005P1N6ST000</a> |
| 1.7       | $\pm 0.1$ nH | 100                               | 23        | 250                               | 10.0                       | 15.4      | 0.04             | 0.02             | 1000                      | <a href="#">MHQ1005P1N7BT000</a> |
| 1.7       | $\pm 0.2$ nH | 100                               | 23        | 250                               | 10.0                       | 15.4      | 0.04             | 0.02             | 1000                      | <a href="#">MHQ1005P1N7CT000</a> |
| 1.7       | $\pm 0.3$ nH | 100                               | 23        | 250                               | 10.0                       | 15.4      | 0.04             | 0.02             | 1000                      | <a href="#">MHQ1005P1N7ST000</a> |
| 1.8       | $\pm 0.1$ nH | 100                               | 23        | 250                               | 9.0                        | 15.1      | 0.04             | 0.03             | 1000                      | <a href="#">MHQ1005P1N8BT000</a> |
| 1.8       | $\pm 0.2$ nH | 100                               | 23        | 250                               | 9.0                        | 15.1      | 0.04             | 0.03             | 1000                      | <a href="#">MHQ1005P1N8CT000</a> |
| 1.8       | $\pm 0.3$ nH | 100                               | 23        | 250                               | 9.0                        | 15.1      | 0.04             | 0.03             | 1000                      | <a href="#">MHQ1005P1N8ST000</a> |
| 1.9       | $\pm 0.1$ nH | 100                               | 23        | 250                               | 8.0                        | 14.8      | 0.05             | 0.03             | 1000                      | <a href="#">MHQ1005P1N9BT000</a> |
| 1.9       | $\pm 0.2$ nH | 100                               | 23        | 250                               | 8.0                        | 14.8      | 0.05             | 0.03             | 1000                      | <a href="#">MHQ1005P1N9CT000</a> |
| 1.9       | $\pm 0.3$ nH | 100                               | 23        | 250                               | 8.0                        | 14.8      | 0.05             | 0.03             | 1000                      | <a href="#">MHQ1005P1N9ST000</a> |
| 2.0       | $\pm 0.1$ nH | 100                               | 23        | 250                               | 8.0                        | 11.5      | 0.05             | 0.03             | 1000                      | <a href="#">MHQ1005P2N0BT000</a> |
| 2.0       | $\pm 0.2$ nH | 100                               | 23        | 250                               | 8.0                        | 11.5      | 0.05             | 0.03             | 1000                      | <a href="#">MHQ1005P2N0CT000</a> |
| 2.0       | $\pm 0.3$ nH | 100                               | 23        | 250                               | 8.0                        | 11.5      | 0.05             | 0.03             | 1000                      | <a href="#">MHQ1005P2N0ST000</a> |
| 2.1       | $\pm 0.1$ nH | 100                               | 23        | 250                               | 8.0                        | 13.1      | 0.06             | 0.04             | 1000                      | <a href="#">MHQ1005P2N1BT000</a> |
| 2.1       | $\pm 0.2$ nH | 100                               | 23        | 250                               | 8.0                        | 13.1      | 0.06             | 0.04             | 1000                      | <a href="#">MHQ1005P2N1CT000</a> |
| 2.1       | $\pm 0.3$ nH | 100                               | 23        | 250                               | 8.0                        | 13.1      | 0.06             | 0.04             | 1000                      | <a href="#">MHQ1005P2N1ST000</a> |
| 2.2       | $\pm 0.1$ nH | 100                               | 23        | 250                               | 8.0                        | 12.1      | 0.06             | 0.04             | 1000                      | <a href="#">MHQ1005P2N2BT000</a> |
| 2.2       | $\pm 0.2$ nH | 100                               | 23        | 250                               | 8.0                        | 12.1      | 0.06             | 0.04             | 1000                      | <a href="#">MHQ1005P2N2CT000</a> |
| 2.2       | $\pm 0.3$ nH | 100                               | 23        | 250                               | 8.0                        | 12.1      | 0.06             | 0.04             | 1000                      | <a href="#">MHQ1005P2N2ST000</a> |

· Short bar residual inductance =0.556nH

## 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.

## MHQ1005P type

## CHARACTERISTICS SPECIFICATION TABLE

| L<br>(nH) | Tolerance    | L measuring<br>frequency<br>(MHz) | Q<br>min. | 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. |                           |                                  |
| 2.3       | $\pm 0.1$ nH | 100                               | 23        | 250                               | 7.0                        | 10.5      | 0.07             | 0.05             | 1000                      | <a href="#">MHQ1005P2N3BT000</a> |
| 2.3       | $\pm 0.2$ nH | 100                               | 23        | 250                               | 7.0                        | 10.5      | 0.07             | 0.05             | 1000                      | <a href="#">MHQ1005P2N3CT000</a> |
| 2.3       | $\pm 0.3$ nH | 100                               | 23        | 250                               | 7.0                        | 10.5      | 0.07             | 0.05             | 1000                      | <a href="#">MHQ1005P2N3ST000</a> |
| 2.4       | $\pm 0.1$ nH | 100                               | 23        | 250                               | 6.5                        | 9.8       | 0.06             | 0.04             | 1000                      | <a href="#">MHQ1005P2N4BT000</a> |
| 2.4       | $\pm 0.2$ nH | 100                               | 23        | 250                               | 6.5                        | 9.8       | 0.06             | 0.04             | 1000                      | <a href="#">MHQ1005P2N4CT000</a> |
| 2.4       | $\pm 0.3$ nH | 100                               | 23        | 250                               | 6.5                        | 9.8       | 0.06             | 0.04             | 1000                      | <a href="#">MHQ1005P2N4ST000</a> |
| 2.5       | $\pm 0.1$ nH | 100                               | 23        | 250                               | 6.5                        | 10.3      | 0.07             | 0.05             | 900                       | <a href="#">MHQ1005P2N5BT000</a> |
| 2.5       | $\pm 0.2$ nH | 100                               | 23        | 250                               | 6.5                        | 10.3      | 0.07             | 0.05             | 900                       | <a href="#">MHQ1005P2N5CT000</a> |
| 2.5       | $\pm 0.3$ nH | 100                               | 23        | 250                               | 6.5                        | 10.3      | 0.07             | 0.05             | 900                       | <a href="#">MHQ1005P2N5ST000</a> |
| 2.6       | $\pm 0.1$ nH | 100                               | 23        | 250                               | 6.5                        | 10.1      | 0.07             | 0.05             | 900                       | <a href="#">MHQ1005P2N6BT000</a> |
| 2.6       | $\pm 0.2$ nH | 100                               | 23        | 250                               | 6.5                        | 10.1      | 0.07             | 0.05             | 900                       | <a href="#">MHQ1005P2N6CT000</a> |
| 2.6       | $\pm 0.3$ nH | 100                               | 23        | 250                               | 6.5                        | 10.1      | 0.07             | 0.05             | 900                       | <a href="#">MHQ1005P2N6ST000</a> |
| 2.7       | $\pm 0.1$ nH | 100                               | 23        | 250                               | 6.5                        | 9.6       | 0.07             | 0.04             | 900                       | <a href="#">MHQ1005P2N7BT000</a> |
| 2.7       | $\pm 0.2$ nH | 100                               | 23        | 250                               | 6.5                        | 9.6       | 0.07             | 0.04             | 900                       | <a href="#">MHQ1005P2N7CT000</a> |
| 2.7       | $\pm 0.3$ nH | 100                               | 23        | 250                               | 6.5                        | 9.6       | 0.07             | 0.04             | 900                       | <a href="#">MHQ1005P2N7ST000</a> |
| 2.8       | $\pm 0.1$ nH | 100                               | 23        | 250                               | 6.5                        | 10.3      | 0.08             | 0.05             | 900                       | <a href="#">MHQ1005P2N8BT000</a> |
| 2.8       | $\pm 0.2$ nH | 100                               | 23        | 250                               | 6.5                        | 10.3      | 0.08             | 0.05             | 900                       | <a href="#">MHQ1005P2N8CT000</a> |
| 2.8       | $\pm 0.3$ nH | 100                               | 23        | 250                               | 6.5                        | 10.3      | 0.08             | 0.05             | 900                       | <a href="#">MHQ1005P2N8ST000</a> |
| 2.9       | $\pm 0.1$ nH | 100                               | 23        | 250                               | 6.5                        | 9.9       | 0.08             | 0.05             | 900                       | <a href="#">MHQ1005P2N9BT000</a> |
| 2.9       | $\pm 0.2$ nH | 100                               | 23        | 250                               | 6.5                        | 9.9       | 0.08             | 0.05             | 900                       | <a href="#">MHQ1005P2N9CT000</a> |
| 2.9       | $\pm 0.3$ nH | 100                               | 23        | 250                               | 6.5                        | 9.9       | 0.08             | 0.05             | 900                       | <a href="#">MHQ1005P2N9ST000</a> |
| 3.0       | $\pm 0.1$ nH | 100                               | 23        | 250                               | 6.0                        | 9.4       | 0.08             | 0.06             | 900                       | <a href="#">MHQ1005P3N0BT000</a> |
| 3.0       | $\pm 0.2$ nH | 100                               | 23        | 250                               | 6.0                        | 9.4       | 0.08             | 0.06             | 900                       | <a href="#">MHQ1005P3N0CT000</a> |
| 3.0       | $\pm 0.3$ nH | 100                               | 23        | 250                               | 6.0                        | 9.4       | 0.08             | 0.06             | 900                       | <a href="#">MHQ1005P3N0ST000</a> |
| 3.1       | $\pm 0.1$ nH | 100                               | 23        | 250                               | 6.0                        | 10.3      | 0.09             | 0.06             | 900                       | <a href="#">MHQ1005P3N1BT000</a> |
| 3.1       | $\pm 0.2$ nH | 100                               | 23        | 250                               | 6.0                        | 10.3      | 0.09             | 0.06             | 900                       | <a href="#">MHQ1005P3N1CT000</a> |
| 3.1       | $\pm 0.3$ nH | 100                               | 23        | 250                               | 6.0                        | 10.3      | 0.09             | 0.06             | 900                       | <a href="#">MHQ1005P3N1ST000</a> |
| 3.2       | $\pm 0.1$ nH | 100                               | 23        | 250                               | 6.0                        | 10.0      | 0.09             | 0.07             | 900                       | <a href="#">MHQ1005P3N2BT000</a> |
| 3.2       | $\pm 0.2$ nH | 100                               | 23        | 250                               | 6.0                        | 10.0      | 0.09             | 0.07             | 900                       | <a href="#">MHQ1005P3N2CT000</a> |
| 3.2       | $\pm 0.3$ nH | 100                               | 23        | 250                               | 6.0                        | 10.0      | 0.09             | 0.07             | 900                       | <a href="#">MHQ1005P3N2ST000</a> |
| 3.3       | $\pm 0.1$ nH | 100                               | 23        | 250                               | 6.0                        | 9.0       | 0.08             | 0.06             | 900                       | <a href="#">MHQ1005P3N3BT000</a> |
| 3.3       | $\pm 0.2$ nH | 100                               | 23        | 250                               | 6.0                        | 9.0       | 0.08             | 0.06             | 900                       | <a href="#">MHQ1005P3N3CT000</a> |
| 3.3       | $\pm 0.3$ nH | 100                               | 23        | 250                               | 6.0                        | 9.0       | 0.08             | 0.06             | 900                       | <a href="#">MHQ1005P3N3ST000</a> |
| 3.4       | $\pm 0.1$ nH | 100                               | 23        | 250                               | 6.0                        | 9.0       | 0.09             | 0.06             | 900                       | <a href="#">MHQ1005P3N4BT000</a> |
| 3.4       | $\pm 0.2$ nH | 100                               | 23        | 250                               | 6.0                        | 9.0       | 0.09             | 0.06             | 900                       | <a href="#">MHQ1005P3N4CT000</a> |
| 3.4       | $\pm 0.3$ nH | 100                               | 23        | 250                               | 6.0                        | 9.0       | 0.09             | 0.06             | 900                       | <a href="#">MHQ1005P3N4ST000</a> |
| 3.5       | $\pm 0.1$ nH | 100                               | 23        | 250                               | 5.8                        | 8.8       | 0.09             | 0.07             | 900                       | <a href="#">MHQ1005P3N5BT000</a> |
| 3.5       | $\pm 0.2$ nH | 100                               | 23        | 250                               | 5.8                        | 8.8       | 0.09             | 0.07             | 900                       | <a href="#">MHQ1005P3N5CT000</a> |
| 3.5       | $\pm 0.3$ nH | 100                               | 23        | 250                               | 5.8                        | 8.8       | 0.09             | 0.07             | 900                       | <a href="#">MHQ1005P3N5ST000</a> |
| 3.6       | $\pm 0.1$ nH | 100                               | 23        | 250                               | 5.5                        | 8.4       | 0.09             | 0.07             | 900                       | <a href="#">MHQ1005P3N6BT000</a> |
| 3.6       | $\pm 0.2$ nH | 100                               | 23        | 250                               | 5.5                        | 8.4       | 0.09             | 0.07             | 900                       | <a href="#">MHQ1005P3N6CT000</a> |
| 3.6       | $\pm 0.3$ nH | 100                               | 23        | 250                               | 5.5                        | 8.4       | 0.09             | 0.07             | 900                       | <a href="#">MHQ1005P3N6ST000</a> |
| 3.7       | $\pm 0.1$ nH | 100                               | 23        | 250                               | 5.5                        | 8.5       | 0.10             | 0.08             | 900                       | <a href="#">MHQ1005P3N7BT000</a> |
| 3.7       | $\pm 0.2$ nH | 100                               | 23        | 250                               | 5.5                        | 8.5       | 0.10             | 0.08             | 900                       | <a href="#">MHQ1005P3N7CT000</a> |
| 3.7       | $\pm 0.3$ nH | 100                               | 23        | 250                               | 5.5                        | 8.5       | 0.10             | 0.08             | 900                       | <a href="#">MHQ1005P3N7ST000</a> |

· Short bar residual inductance =0.556nH

## 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.

# MHQ1005P type

## CHARACTERISTICS SPECIFICATION TABLE

| L<br>(nH) | Tolerance    | L measuring<br>frequency<br>(MHz) | Q<br>min. | 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. |                           |                                  |
| 3.8       | $\pm 0.1$ nH | 100                               | 23        | 250                               | 5.0                        | 7.9       | 0.10             | 0.07             | 900                       | <a href="#">MHQ1005P3N8BT000</a> |
| 3.8       | $\pm 0.2$ nH | 100                               | 23        | 250                               | 5.0                        | 7.9       | 0.10             | 0.07             | 900                       | <a href="#">MHQ1005P3N8CT000</a> |
| 3.8       | $\pm 0.3$ nH | 100                               | 23        | 250                               | 5.0                        | 7.9       | 0.10             | 0.07             | 900                       | <a href="#">MHQ1005P3N8ST000</a> |
| 3.9       | $\pm 0.1$ nH | 100                               | 23        | 250                               | 5.0                        | 7.7       | 0.09             | 0.07             | 900                       | <a href="#">MHQ1005P3N9BT000</a> |
| 3.9       | $\pm 0.2$ nH | 100                               | 23        | 250                               | 5.0                        | 7.7       | 0.09             | 0.07             | 900                       | <a href="#">MHQ1005P3N9CT000</a> |
| 3.9       | $\pm 0.3$ nH | 100                               | 23        | 250                               | 5.0                        | 7.7       | 0.09             | 0.07             | 900                       | <a href="#">MHQ1005P3N9ST000</a> |
| 4.1       | $\pm 0.1$ nH | 100                               | 23        | 250                               | 5.0                        | 7.7       | 0.10             | 0.07             | 800                       | <a href="#">MHQ1005P4N1BT000</a> |
| 4.1       | $\pm 0.2$ nH | 100                               | 23        | 250                               | 5.0                        | 7.7       | 0.10             | 0.07             | 800                       | <a href="#">MHQ1005P4N1CT000</a> |
| 4.1       | $\pm 0.3$ nH | 100                               | 23        | 250                               | 5.0                        | 7.7       | 0.10             | 0.07             | 800                       | <a href="#">MHQ1005P4N1ST000</a> |
| 4.3       | $\pm 0.1$ nH | 100                               | 23        | 250                               | 5.0                        | 7.1       | 0.10             | 0.08             | 800                       | <a href="#">MHQ1005P4N3BT000</a> |
| 4.3       | $\pm 0.2$ nH | 100                               | 23        | 250                               | 5.0                        | 7.1       | 0.10             | 0.08             | 800                       | <a href="#">MHQ1005P4N3CT000</a> |
| 4.3       | $\pm 0.3$ nH | 100                               | 23        | 250                               | 5.0                        | 7.1       | 0.10             | 0.08             | 800                       | <a href="#">MHQ1005P4N3ST000</a> |
| 4.7       | $\pm 0.1$ nH | 100                               | 23        | 250                               | 5.0                        | 7.7       | 0.11             | 0.08             | 800                       | <a href="#">MHQ1005P4N7BT000</a> |
| 4.7       | $\pm 0.2$ nH | 100                               | 23        | 250                               | 5.0                        | 7.7       | 0.11             | 0.08             | 800                       | <a href="#">MHQ1005P4N7CT000</a> |
| 4.7       | $\pm 0.3$ nH | 100                               | 23        | 250                               | 5.0                        | 7.7       | 0.11             | 0.08             | 800                       | <a href="#">MHQ1005P4N7ST000</a> |
| 5.1       | $\pm 0.1$ nH | 100                               | 23        | 250                               | 4.5                        | 7.2       | 0.12             | 0.09             | 800                       | <a href="#">MHQ1005P5N1BT000</a> |
| 5.1       | $\pm 0.2$ nH | 100                               | 23        | 250                               | 4.5                        | 7.2       | 0.12             | 0.09             | 800                       | <a href="#">MHQ1005P5N1CT000</a> |
| 5.1       | $\pm 0.3$ nH | 100                               | 23        | 250                               | 4.5                        | 7.2       | 0.12             | 0.09             | 800                       | <a href="#">MHQ1005P5N1ST000</a> |
| 5.6       | $\pm 0.1$ nH | 100                               | 23        | 250                               | 4.5                        | 6.5       | 0.13             | 0.10             | 800                       | <a href="#">MHQ1005P5N6BT000</a> |
| 5.6       | $\pm 0.2$ nH | 100                               | 23        | 250                               | 4.5                        | 6.5       | 0.13             | 0.10             | 800                       | <a href="#">MHQ1005P5N6CT000</a> |
| 5.6       | $\pm 0.3$ nH | 100                               | 23        | 250                               | 4.5                        | 6.5       | 0.13             | 0.10             | 800                       | <a href="#">MHQ1005P5N6ST000</a> |
| 5.8       | $\pm 0.1$ nH | 100                               | 23        | 250                               | 4.0                        | 5.9       | 0.13             | 0.09             | 700                       | <a href="#">MHQ1005P5N8BT000</a> |
| 5.8       | $\pm 0.2$ nH | 100                               | 23        | 250                               | 4.0                        | 5.9       | 0.13             | 0.09             | 700                       | <a href="#">MHQ1005P5N8CT000</a> |
| 5.8       | $\pm 0.3$ nH | 100                               | 23        | 250                               | 4.0                        | 5.9       | 0.13             | 0.09             | 700                       | <a href="#">MHQ1005P5N8ST000</a> |
| 6.2       | $\pm 0.1$ nH | 100                               | 23        | 250                               | 4.0                        | 5.9       | 0.13             | 0.09             | 700                       | <a href="#">MHQ1005P6N2BT000</a> |
| 6.2       | $\pm 0.2$ nH | 100                               | 23        | 250                               | 4.0                        | 5.9       | 0.13             | 0.09             | 700                       | <a href="#">MHQ1005P6N2CT000</a> |
| 6.2       | $\pm 0.3$ nH | 100                               | 23        | 250                               | 4.0                        | 5.9       | 0.13             | 0.09             | 700                       | <a href="#">MHQ1005P6N2ST000</a> |
| 6.8       | $\pm 2\%$    | 100                               | 23        | 250                               | 4.0                        | 5.8       | 0.14             | 0.10             | 700                       | <a href="#">MHQ1005P6N8GT000</a> |
| 6.8       | $\pm 3\%$    | 100                               | 23        | 250                               | 4.0                        | 5.8       | 0.14             | 0.10             | 700                       | <a href="#">MHQ1005P6N8HT000</a> |
| 6.8       | $\pm 5\%$    | 100                               | 23        | 250                               | 4.0                        | 5.8       | 0.14             | 0.10             | 700                       | <a href="#">MHQ1005P6N8JT000</a> |
| 7.3       | $\pm 2\%$    | 100                               | 23        | 250                               | 4.0                        | 5.7       | 0.17             | 0.13             | 600                       | <a href="#">MHQ1005P7N3GT000</a> |
| 7.3       | $\pm 3\%$    | 100                               | 23        | 250                               | 4.0                        | 5.7       | 0.17             | 0.13             | 600                       | <a href="#">MHQ1005P7N3HT000</a> |
| 7.3       | $\pm 5\%$    | 100                               | 23        | 250                               | 4.0                        | 5.7       | 0.17             | 0.13             | 600                       | <a href="#">MHQ1005P7N3JT000</a> |
| 7.5       | $\pm 2\%$    | 100                               | 23        | 250                               | 4.0                        | 5.6       | 0.16             | 0.12             | 600                       | <a href="#">MHQ1005P7N5GT000</a> |
| 7.5       | $\pm 3\%$    | 100                               | 23        | 250                               | 4.0                        | 5.6       | 0.16             | 0.12             | 600                       | <a href="#">MHQ1005P7N5HT000</a> |
| 7.5       | $\pm 5\%$    | 100                               | 23        | 250                               | 4.0                        | 5.6       | 0.16             | 0.12             | 600                       | <a href="#">MHQ1005P7N5JT000</a> |
| 8.2       | $\pm 2\%$    | 100                               | 23        | 250                               | 3.6                        | 4.9       | 0.16             | 0.12             | 550                       | <a href="#">MHQ1005P8N2GT000</a> |
| 8.2       | $\pm 3\%$    | 100                               | 23        | 250                               | 3.6                        | 4.9       | 0.16             | 0.12             | 550                       | <a href="#">MHQ1005P8N2HT000</a> |
| 8.2       | $\pm 5\%$    | 100                               | 23        | 250                               | 3.6                        | 4.9       | 0.16             | 0.12             | 550                       | <a href="#">MHQ1005P8N2JT000</a> |
| 8.7       | $\pm 2\%$    | 100                               | 23        | 250                               | 3.5                        | 4.7       | 0.17             | 0.13             | 550                       | <a href="#">MHQ1005P8N7GT000</a> |
| 8.7       | $\pm 3\%$    | 100                               | 23        | 250                               | 3.5                        | 4.7       | 0.17             | 0.13             | 550                       | <a href="#">MHQ1005P8N7HT000</a> |
| 8.7       | $\pm 5\%$    | 100                               | 23        | 250                               | 3.5                        | 4.7       | 0.17             | 0.13             | 550                       | <a href="#">MHQ1005P8N7JT000</a> |
| 9.1       | $\pm 2\%$    | 100                               | 23        | 250                               | 3.4                        | 4.5       | 0.17             | 0.13             | 550                       | <a href="#">MHQ1005P9N1GT000</a> |
| 9.1       | $\pm 3\%$    | 100                               | 23        | 250                               | 3.4                        | 4.5       | 0.17             | 0.13             | 550                       | <a href="#">MHQ1005P9N1HT000</a> |
| 9.1       | $\pm 5\%$    | 100                               | 23        | 250                               | 3.4                        | 4.5       | 0.17             | 0.13             | 550                       | <a href="#">MHQ1005P9N1JT000</a> |

· Short bar residual inductance =0.556nH

### 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.

## MHQ1005P type

## CHARACTERISTICS SPECIFICATION TABLE

| L<br>(nH) | Tolerance | L measuring<br>frequency<br>(MHz) | Q<br>min. | 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. |                           |                                  |
| 9.5       | ±2%       | 100                               | 23        | 250                               | 3.3                        | 4.7       | 0.21             | 0.16             | 500                       | <a href="#">MHQ1005P9N5GT000</a> |
| 9.5       | ±3%       | 100                               | 23        | 250                               | 3.3                        | 4.7       | 0.21             | 0.16             | 500                       | <a href="#">MHQ1005P9N5HT000</a> |
| 9.5       | ±5%       | 100                               | 23        | 250                               | 3.3                        | 4.7       | 0.21             | 0.16             | 500                       | <a href="#">MHQ1005P9N5JT000</a> |
| 10        | ±2%       | 100                               | 23        | 250                               | 3.3                        | 4.6       | 0.19             | 0.15             | 500                       | <a href="#">MHQ1005P10NGT000</a> |
| 10        | ±3%       | 100                               | 23        | 250                               | 3.3                        | 4.6       | 0.19             | 0.15             | 500                       | <a href="#">MHQ1005P10NHT000</a> |
| 10        | ±5%       | 100                               | 23        | 250                               | 3.3                        | 4.6       | 0.19             | 0.15             | 500                       | <a href="#">MHQ1005P10NJT000</a> |
| 11        | ±2%       | 100                               | 23        | 250                               | 3.0                        | 4.2       | 0.24             | 0.20             | 450                       | <a href="#">MHQ1005P11NGT000</a> |
| 11        | ±3%       | 100                               | 23        | 250                               | 3.0                        | 4.2       | 0.24             | 0.20             | 450                       | <a href="#">MHQ1005P11NHT000</a> |
| 11        | ±5%       | 100                               | 23        | 250                               | 3.0                        | 4.2       | 0.24             | 0.20             | 450                       | <a href="#">MHQ1005P11NJT000</a> |
| 12        | ±2%       | 100                               | 23        | 250                               | 2.8                        | 3.8       | 0.24             | 0.19             | 450                       | <a href="#">MHQ1005P12NGT000</a> |
| 12        | ±3%       | 100                               | 23        | 250                               | 2.8                        | 3.8       | 0.24             | 0.19             | 450                       | <a href="#">MHQ1005P12NHT000</a> |
| 12        | ±5%       | 100                               | 23        | 250                               | 2.8                        | 3.8       | 0.24             | 0.19             | 450                       | <a href="#">MHQ1005P12NJT000</a> |
| 13        | ±2%       | 100                               | 23        | 250                               | 2.5                        | 3.5       | 0.26             | 0.20             | 420                       | <a href="#">MHQ1005P13NGT000</a> |
| 13        | ±3%       | 100                               | 23        | 250                               | 2.5                        | 3.5       | 0.26             | 0.20             | 420                       | <a href="#">MHQ1005P13NHT000</a> |
| 13        | ±5%       | 100                               | 23        | 250                               | 2.5                        | 3.5       | 0.26             | 0.20             | 420                       | <a href="#">MHQ1005P13NJT000</a> |
| 15        | ±2%       | 100                               | 23        | 250                               | 2.3                        | 3.2       | 0.28             | 0.22             | 400                       | <a href="#">MHQ1005P15NGT000</a> |
| 15        | ±3%       | 100                               | 23        | 250                               | 2.3                        | 3.2       | 0.28             | 0.22             | 400                       | <a href="#">MHQ1005P15NHT000</a> |
| 15        | ±5%       | 100                               | 23        | 250                               | 2.3                        | 3.2       | 0.28             | 0.22             | 400                       | <a href="#">MHQ1005P15NJT000</a> |
| 16        | ±2%       | 100                               | 20        | 250                               | 2.3                        | 3.5       | 0.80             | 0.57             | 260                       | <a href="#">MHQ1005P16NGT000</a> |
| 16        | ±3%       | 100                               | 20        | 250                               | 2.3                        | 3.5       | 0.80             | 0.57             | 260                       | <a href="#">MHQ1005P16NHT000</a> |
| 16        | ±5%       | 100                               | 20        | 250                               | 2.3                        | 3.5       | 0.80             | 0.57             | 260                       | <a href="#">MHQ1005P16NJT000</a> |
| 18        | ±2%       | 100                               | 22        | 250                               | 2.3                        | 3.4       | 0.80             | 0.48             | 260                       | <a href="#">MHQ1005P18NGT000</a> |
| 18        | ±3%       | 100                               | 22        | 250                               | 2.3                        | 3.4       | 0.80             | 0.48             | 260                       | <a href="#">MHQ1005P18NHT000</a> |
| 18        | ±5%       | 100                               | 22        | 250                               | 2.3                        | 3.4       | 0.80             | 0.48             | 260                       | <a href="#">MHQ1005P18NJT000</a> |
| 19        | ±2%       | 100                               | 20        | 250                               | 2.3                        | 3.2       | 0.80             | 0.46             | 260                       | <a href="#">MHQ1005P19NGT000</a> |
| 19        | ±3%       | 100                               | 20        | 250                               | 2.3                        | 3.2       | 0.80             | 0.46             | 260                       | <a href="#">MHQ1005P19NHT000</a> |
| 19        | ±5%       | 100                               | 20        | 250                               | 2.3                        | 3.2       | 0.80             | 0.46             | 260                       | <a href="#">MHQ1005P19NJT000</a> |
| 20        | ±2%       | 100                               | 20        | 250                               | 2.1                        | 3.1       | 1.10             | 0.46             | 260                       | <a href="#">MHQ1005P20NGT000</a> |
| 20        | ±3%       | 100                               | 20        | 250                               | 2.1                        | 3.1       | 1.10             | 0.46             | 260                       | <a href="#">MHQ1005P20NHT000</a> |
| 20        | ±5%       | 100                               | 20        | 250                               | 2.1                        | 3.1       | 1.10             | 0.46             | 260                       | <a href="#">MHQ1005P20NJT000</a> |
| 22        | ±2%       | 100                               | 20        | 250                               | 2.1                        | 2.9       | 1.10             | 0.66             | 230                       | <a href="#">MHQ1005P22NGT000</a> |
| 22        | ±3%       | 100                               | 20        | 250                               | 2.1                        | 2.9       | 1.10             | 0.66             | 230                       | <a href="#">MHQ1005P22NHT000</a> |
| 22        | ±5%       | 100                               | 20        | 250                               | 2.1                        | 2.9       | 1.10             | 0.66             | 230                       | <a href="#">MHQ1005P22NJT000</a> |
| 23        | ±2%       | 100                               | 22        | 250                               | 2.0                        | 2.9       | 1.10             | 0.62             | 230                       | <a href="#">MHQ1005P23NGT000</a> |
| 23        | ±3%       | 100                               | 22        | 250                               | 2.0                        | 2.9       | 1.10             | 0.62             | 230                       | <a href="#">MHQ1005P23NHT000</a> |
| 23        | ±5%       | 100                               | 22        | 250                               | 2.0                        | 2.9       | 1.10             | 0.62             | 230                       | <a href="#">MHQ1005P23NJT000</a> |
| 24        | ±2%       | 100                               | 20        | 250                               | 2.0                        | 2.8       | 1.20             | 0.55             | 230                       | <a href="#">MHQ1005P24NGT000</a> |
| 24        | ±3%       | 100                               | 20        | 250                               | 2.0                        | 2.8       | 1.20             | 0.55             | 230                       | <a href="#">MHQ1005P24NHT000</a> |
| 24        | ±5%       | 100                               | 20        | 250                               | 2.0                        | 2.8       | 1.20             | 0.55             | 230                       | <a href="#">MHQ1005P24NJT000</a> |
| 27        | ±2%       | 100                               | 20        | 250                               | 1.7                        | 2.6       | 1.30             | 0.66             | 230                       | <a href="#">MHQ1005P27NGT000</a> |
| 27        | ±3%       | 100                               | 20        | 250                               | 1.7                        | 2.6       | 1.30             | 0.66             | 230                       | <a href="#">MHQ1005P27NHT000</a> |
| 27        | ±5%       | 100                               | 20        | 250                               | 1.7                        | 2.6       | 1.30             | 0.66             | 230                       | <a href="#">MHQ1005P27NJT000</a> |
| 30        | ±2%       | 100                               | 20        | 250                               | 1.7                        | 2.4       | 1.30             | 0.80             | 220                       | <a href="#">MHQ1005P30NGT000</a> |
| 30        | ±3%       | 100                               | 20        | 250                               | 1.7                        | 2.4       | 1.30             | 0.80             | 220                       | <a href="#">MHQ1005P30NHT000</a> |
| 30        | ±5%       | 100                               | 20        | 250                               | 1.7                        | 2.4       | 1.30             | 0.80             | 220                       | <a href="#">MHQ1005P30NJT000</a> |

· Short bar residual inductance =0.556nH

## 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.

# MHQ1005P type

## CHARACTERISTICS SPECIFICATION TABLE

| L<br>(nH) | Tolerance | L measuring<br>frequency<br>(MHz) | Q<br>min. | 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. |                           |                                  |
| 33        | ±2%       | 100                               | 20        | 250                               | 1.6                        | 2.3       | 1.50             | 0.74             | 220                       | <a href="#">MHQ1005P33NGT000</a> |
| 33        | ±3%       | 100                               | 20        | 250                               | 1.6                        | 2.3       | 1.50             | 0.74             | 220                       | <a href="#">MHQ1005P33NHT000</a> |
| 33        | ±5%       | 100                               | 20        | 250                               | 1.6                        | 2.3       | 1.50             | 0.74             | 220                       | <a href="#">MHQ1005P33NJT000</a> |
| 36        | ±2%       | 100                               | 20        | 250                               | 1.6                        | 2.2       | 1.50             | 0.92             | 190                       | <a href="#">MHQ1005P36NGT000</a> |
| 36        | ±3%       | 100                               | 20        | 250                               | 1.6                        | 2.2       | 1.50             | 0.92             | 190                       | <a href="#">MHQ1005P36NHT000</a> |
| 36        | ±5%       | 100                               | 20        | 250                               | 1.6                        | 2.2       | 1.50             | 0.92             | 190                       | <a href="#">MHQ1005P36NJT000</a> |
| 39        | ±2%       | 100                               | 20        | 250                               | 1.4                        | 2.1       | 1.50             | 0.95             | 190                       | <a href="#">MHQ1005P39NGT000</a> |
| 39        | ±3%       | 100                               | 20        | 250                               | 1.4                        | 2.1       | 1.50             | 0.95             | 190                       | <a href="#">MHQ1005P39NHT000</a> |
| 39        | ±5%       | 100                               | 20        | 250                               | 1.4                        | 2.1       | 1.50             | 0.95             | 190                       | <a href="#">MHQ1005P39NJT000</a> |
| 40        | ±2%       | 100                               | 20        | 250                               | 1.4                        | 2.1       | 1.50             | 1.12             | 190                       | <a href="#">MHQ1005P40NGT000</a> |
| 40        | ±3%       | 100                               | 20        | 250                               | 1.4                        | 2.1       | 1.50             | 1.12             | 190                       | <a href="#">MHQ1005P40NHT000</a> |
| 40        | ±5%       | 100                               | 20        | 250                               | 1.4                        | 2.1       | 1.50             | 1.12             | 190                       | <a href="#">MHQ1005P40NJT000</a> |
| 43        | ±2%       | 100                               | 22        | 250                               | 1.4                        | 2.0       | 1.60             | 1.06             | 190                       | <a href="#">MHQ1005P43NGT000</a> |
| 43        | ±3%       | 100                               | 22        | 250                               | 1.4                        | 2.0       | 1.60             | 1.06             | 190                       | <a href="#">MHQ1005P43NHT000</a> |
| 43        | ±5%       | 100                               | 22        | 250                               | 1.4                        | 2.0       | 1.60             | 1.06             | 190                       | <a href="#">MHQ1005P43NJT000</a> |
| 47        | ±2%       | 100                               | 22        | 250                               | 1.3                        | 1.9       | 1.60             | 1.09             | 190                       | <a href="#">MHQ1005P47NGT000</a> |
| 47        | ±3%       | 100                               | 22        | 250                               | 1.3                        | 1.9       | 1.60             | 1.09             | 190                       | <a href="#">MHQ1005P47NHT000</a> |
| 47        | ±5%       | 100                               | 22        | 250                               | 1.3                        | 1.9       | 1.60             | 1.09             | 190                       | <a href="#">MHQ1005P47NJT000</a> |
| 51        | ±2%       | 100                               | 22        | 250                               | 1.3                        | 1.8       | 1.80             | 1.17             | 190                       | <a href="#">MHQ1005P51NGT000</a> |
| 51        | ±3%       | 100                               | 22        | 250                               | 1.3                        | 1.8       | 1.80             | 1.17             | 190                       | <a href="#">MHQ1005P51NHT000</a> |
| 51        | ±5%       | 100                               | 22        | 250                               | 1.3                        | 1.8       | 1.80             | 1.17             | 190                       | <a href="#">MHQ1005P51NJT000</a> |
| 56        | ±2%       | 100                               | 22        | 250                               | 1.2                        | 1.8       | 1.80             | 1.22             | 180                       | <a href="#">MHQ1005P56NGT000</a> |
| 56        | ±3%       | 100                               | 22        | 250                               | 1.2                        | 1.8       | 1.80             | 1.22             | 180                       | <a href="#">MHQ1005P56NHT000</a> |
| 56        | ±5%       | 100                               | 22        | 250                               | 1.2                        | 1.8       | 1.80             | 1.22             | 180                       | <a href="#">MHQ1005P56NJT000</a> |
| 62        | ±2%       | 100                               | 22        | 250                               | 1.1                        | 1.6       | 1.90             | 1.36             | 180                       | <a href="#">MHQ1005P62NGT000</a> |
| 62        | ±3%       | 100                               | 22        | 250                               | 1.1                        | 1.6       | 1.90             | 1.36             | 180                       | <a href="#">MHQ1005P62NHT000</a> |
| 62        | ±5%       | 100                               | 22        | 250                               | 1.1                        | 1.6       | 1.90             | 1.36             | 180                       | <a href="#">MHQ1005P62NJT000</a> |
| 68        | ±2%       | 100                               | 22        | 250                               | 1.1                        | 1.6       | 2.00             | 1.43             | 160                       | <a href="#">MHQ1005P68NGT000</a> |
| 68        | ±3%       | 100                               | 22        | 250                               | 1.1                        | 1.6       | 2.00             | 1.43             | 160                       | <a href="#">MHQ1005P68NHT000</a> |
| 68        | ±5%       | 100                               | 22        | 250                               | 1.1                        | 1.6       | 2.00             | 1.43             | 160                       | <a href="#">MHQ1005P68NJT000</a> |
| 72        | ±2%       | 100                               | 22        | 250                               | 1.1                        | 1.5       | 2.20             | 1.62             | 160                       | <a href="#">MHQ1005P72NGT000</a> |
| 72        | ±3%       | 100                               | 22        | 250                               | 1.1                        | 1.5       | 2.20             | 1.62             | 160                       | <a href="#">MHQ1005P72NHT000</a> |
| 72        | ±5%       | 100                               | 22        | 250                               | 1.1                        | 1.5       | 2.20             | 1.62             | 160                       | <a href="#">MHQ1005P72NJT000</a> |
| 75        | ±2%       | 100                               | 22        | 250                               | 1.1                        | 1.5       | 2.20             | 1.53             | 160                       | <a href="#">MHQ1005P75NGT000</a> |
| 75        | ±3%       | 100                               | 22        | 250                               | 1.1                        | 1.5       | 2.20             | 1.53             | 160                       | <a href="#">MHQ1005P75NHT000</a> |
| 75        | ±5%       | 100                               | 22        | 250                               | 1.1                        | 1.5       | 2.20             | 1.53             | 160                       | <a href="#">MHQ1005P75NJT000</a> |
| 82        | ±2%       | 100                               | 22        | 250                               | 0.9                        | 1.5       | 2.30             | 1.61             | 160                       | <a href="#">MHQ1005P82NGT000</a> |
| 82        | ±3%       | 100                               | 22        | 250                               | 0.9                        | 1.5       | 2.30             | 1.61             | 160                       | <a href="#">MHQ1005P82NHT000</a> |
| 82        | ±5%       | 100                               | 22        | 250                               | 0.9                        | 1.5       | 2.30             | 1.61             | 160                       | <a href="#">MHQ1005P82NJT000</a> |
| 91        | ±2%       | 100                               | 23        | 250                               | 0.9                        | 1.4       | 2.30             | 1.78             | 160                       | <a href="#">MHQ1005P91NGT000</a> |
| 91        | ±3%       | 100                               | 23        | 250                               | 0.9                        | 1.4       | 2.30             | 1.78             | 160                       | <a href="#">MHQ1005P91NHT000</a> |
| 91        | ±5%       | 100                               | 23        | 250                               | 0.9                        | 1.4       | 2.30             | 1.78             | 160                       | <a href="#">MHQ1005P91NJT000</a> |
| 100       | ±2%       | 100                               | 23        | 250                               | 0.9                        | 1.2       | 2.50             | 1.80             | 150                       | <a href="#">MHQ1005PR10GT000</a> |
| 100       | ±3%       | 100                               | 23        | 250                               | 0.9                        | 1.2       | 2.50             | 1.80             | 150                       | <a href="#">MHQ1005PR10HT000</a> |
| 100       | ±5%       | 100                               | 23        | 250                               | 0.9                        | 1.2       | 2.50             | 1.80             | 150                       | <a href="#">MHQ1005PR10JT000</a> |

· Short bar residual inductance =0.556nH

### 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.



## MHQ1005P type

## CHARACTERISTICS SPECIFICATION TABLE

| L   | L measuring frequency |           | Q  | Q measuring frequency |      | Self-resonant frequency |           | DC resistance |                  | Rated current                    | Part No. |
|-----|-----------------------|-----------|----|-----------------------|------|-------------------------|-----------|---------------|------------------|----------------------------------|----------|
|     | (nH)                  | Tolerance |    | (MHz)                 | min. | (MHz)                   | (GHz)min. | (GHz)typ.     | ( $\Omega$ )max. |                                  |          |
| 110 | $\pm 2\%$             | 100       | 22 | 250                   | 0.8  | 1.2                     | 2.70      | 1.98          | 150              | <a href="#">MHQ1005PR11GT000</a> |          |
| 110 | $\pm 3\%$             | 100       | 22 | 250                   | 0.8  | 1.2                     | 2.70      | 1.98          | 150              | <a href="#">MHQ1005PR11HT000</a> |          |
| 110 | $\pm 5\%$             | 100       | 22 | 250                   | 0.8  | 1.2                     | 2.70      | 1.98          | 150              | <a href="#">MHQ1005PR11JT000</a> |          |
| 120 | $\pm 2\%$             | 100       | 22 | 250                   | 0.8  | 1.2                     | 2.70      | 1.81          | 140              | <a href="#">MHQ1005PR12GT000</a> |          |
| 120 | $\pm 3\%$             | 100       | 22 | 250                   | 0.8  | 1.2                     | 2.70      | 1.81          | 140              | <a href="#">MHQ1005PR12HT000</a> |          |
| 120 | $\pm 5\%$             | 100       | 22 | 250                   | 0.8  | 1.2                     | 2.70      | 1.81          | 140              | <a href="#">MHQ1005PR12JT000</a> |          |
| 130 | $\pm 2\%$             | 100       | 22 | 250                   | 0.8  | 1.1                     | 2.90      | 2.18          | 110              | <a href="#">MHQ1005PR13GT000</a> |          |
| 130 | $\pm 3\%$             | 100       | 22 | 250                   | 0.8  | 1.1                     | 2.90      | 2.18          | 110              | <a href="#">MHQ1005PR13HT000</a> |          |
| 130 | $\pm 5\%$             | 100       | 22 | 250                   | 0.8  | 1.1                     | 2.90      | 2.18          | 110              | <a href="#">MHQ1005PR13JT000</a> |          |
| 150 | $\pm 2\%$             | 100       | 22 | 250                   | 0.8  | 1.0                     | 3.00      | 2.03          | 110              | <a href="#">MHQ1005PR15GT000</a> |          |
| 150 | $\pm 3\%$             | 100       | 22 | 250                   | 0.8  | 1.0                     | 3.00      | 2.03          | 110              | <a href="#">MHQ1005PR15HT000</a> |          |
| 150 | $\pm 5\%$             | 100       | 22 | 250                   | 0.8  | 1.0                     | 3.00      | 2.03          | 110              | <a href="#">MHQ1005PR15JT000</a> |          |
| 160 | $\pm 2\%$             | 100       | 22 | 250                   | 0.7  | 1.0                     | 5.80      | 4.79          | 90               | <a href="#">MHQ1005PR16GT000</a> |          |
| 160 | $\pm 3\%$             | 100       | 22 | 250                   | 0.7  | 1.0                     | 5.80      | 4.79          | 90               | <a href="#">MHQ1005PR16HT000</a> |          |
| 160 | $\pm 5\%$             | 100       | 22 | 250                   | 0.7  | 1.0                     | 5.80      | 4.79          | 90               | <a href="#">MHQ1005PR16JT000</a> |          |
| 180 | $\pm 2\%$             | 100       | 18 | 250                   | 0.6  | 0.9                     | 6.00      | 4.86          | 90               | <a href="#">MHQ1005PR18GT000</a> |          |
| 180 | $\pm 3\%$             | 100       | 18 | 250                   | 0.6  | 0.9                     | 6.00      | 4.86          | 90               | <a href="#">MHQ1005PR18HT000</a> |          |
| 180 | $\pm 5\%$             | 100       | 18 | 250                   | 0.6  | 0.9                     | 6.00      | 4.86          | 90               | <a href="#">MHQ1005PR18JT000</a> |          |
| 200 | $\pm 2\%$             | 100       | 18 | 250                   | 0.6  | 0.9                     | 6.20      | 5.06          | 80               | <a href="#">MHQ1005PR20GT000</a> |          |
| 200 | $\pm 3\%$             | 100       | 18 | 250                   | 0.6  | 0.9                     | 6.20      | 5.06          | 80               | <a href="#">MHQ1005PR20HT000</a> |          |
| 200 | $\pm 5\%$             | 100       | 18 | 250                   | 0.6  | 0.9                     | 6.20      | 5.06          | 80               | <a href="#">MHQ1005PR20JT000</a> |          |
| 220 | $\pm 2\%$             | 100       | 18 | 250                   | 0.6  | 0.8                     | 6.60      | 5.38          | 80               | <a href="#">MHQ1005PR22GT000</a> |          |
| 220 | $\pm 3\%$             | 100       | 18 | 250                   | 0.6  | 0.8                     | 6.60      | 5.38          | 80               | <a href="#">MHQ1005PR22HT000</a> |          |
| 220 | $\pm 5\%$             | 100       | 18 | 250                   | 0.6  | 0.8                     | 6.60      | 5.38          | 80               | <a href="#">MHQ1005PR22JT000</a> |          |
| 240 | $\pm 2\%$             | 100       | 18 | 250                   | 0.6  | 0.9                     | 6.80      | 5.58          | 80               | <a href="#">MHQ1005PR24GT000</a> |          |
| 240 | $\pm 3\%$             | 100       | 18 | 250                   | 0.6  | 0.9                     | 6.80      | 5.58          | 80               | <a href="#">MHQ1005PR24HT000</a> |          |
| 240 | $\pm 5\%$             | 100       | 18 | 250                   | 0.6  | 0.9                     | 6.80      | 5.58          | 80               | <a href="#">MHQ1005PR24JT000</a> |          |
| 270 | $\pm 2\%$             | 100       | 18 | 250                   | 0.6  | 0.9                     | 7.00      | 5.74          | 80               | <a href="#">MHQ1005PR27GT000</a> |          |
| 270 | $\pm 3\%$             | 100       | 18 | 250                   | 0.6  | 0.9                     | 7.00      | 5.74          | 80               | <a href="#">MHQ1005PR27HT000</a> |          |
| 270 | $\pm 5\%$             | 100       | 18 | 250                   | 0.6  | 0.9                     | 7.00      | 5.74          | 80               | <a href="#">MHQ1005PR27JT000</a> |          |
| 300 | $\pm 2\%$             | 50        | 13 | 100                   | 0.48 | 0.7                     | 7.80      | 6.38          | 80               | <a href="#">MHQ1005PR30GT000</a> |          |
| 300 | $\pm 3\%$             | 50        | 13 | 100                   | 0.48 | 0.7                     | 7.80      | 6.38          | 80               | <a href="#">MHQ1005PR30HT000</a> |          |
| 300 | $\pm 5\%$             | 50        | 13 | 100                   | 0.48 | 0.7                     | 7.80      | 6.38          | 80               | <a href="#">MHQ1005PR30JT000</a> |          |
| 330 | $\pm 2\%$             | 50        | 13 | 100                   | 0.48 | 0.67                    | 8.20      | 6.64          | 80               | <a href="#">MHQ1005PR33GT000</a> |          |
| 330 | $\pm 3\%$             | 50        | 13 | 100                   | 0.48 | 0.67                    | 8.20      | 6.64          | 80               | <a href="#">MHQ1005PR33HT000</a> |          |
| 330 | $\pm 5\%$             | 50        | 13 | 100                   | 0.48 | 0.67                    | 8.20      | 6.64          | 80               | <a href="#">MHQ1005PR33JT000</a> |          |
| 360 | $\pm 2\%$             | 50        | 13 | 100                   | 0.45 | 0.65                    | 8.40      | 6.91          | 80               | <a href="#">MHQ1005PR36GT000</a> |          |
| 360 | $\pm 3\%$             | 50        | 13 | 100                   | 0.45 | 0.65                    | 8.40      | 6.91          | 80               | <a href="#">MHQ1005PR36HT000</a> |          |
| 360 | $\pm 5\%$             | 50        | 13 | 100                   | 0.45 | 0.65                    | 8.40      | 6.91          | 80               | <a href="#">MHQ1005PR36JT000</a> |          |
| 390 | $\pm 2\%$             | 50        | 13 | 100                   | 0.45 | 0.64                    | 8.80      | 7.20          | 70               | <a href="#">MHQ1005PR39GT000</a> |          |
| 390 | $\pm 3\%$             | 50        | 13 | 100                   | 0.45 | 0.64                    | 8.80      | 7.20          | 70               | <a href="#">MHQ1005PR39HT000</a> |          |
| 390 | $\pm 5\%$             | 50        | 13 | 100                   | 0.45 | 0.64                    | 8.80      | 7.20          | 70               | <a href="#">MHQ1005PR39JT000</a> |          |
| 430 | $\pm 2\%$             | 50        | 13 | 100                   | 0.38 | 0.56                    | 9.60      | 7.88          | 70               | <a href="#">MHQ1005PR43GT000</a> |          |
| 430 | $\pm 3\%$             | 50        | 13 | 100                   | 0.38 | 0.56                    | 9.60      | 7.88          | 70               | <a href="#">MHQ1005PR43HT000</a> |          |
| 430 | $\pm 5\%$             | 50        | 13 | 100                   | 0.38 | 0.56                    | 9.60      | 7.88          | 70               | <a href="#">MHQ1005PR43JT000</a> |          |
| 470 | $\pm 2\%$             | 50        | 13 | 100                   | 0.38 | 0.59                    | 9.60      | 7.90          | 70               | <a href="#">MHQ1005PR47GT000</a> |          |
| 470 | $\pm 3\%$             | 50        | 13 | 100                   | 0.38 | 0.59                    | 9.60      | 7.90          | 70               | <a href="#">MHQ1005PR47HT000</a> |          |
| 470 | $\pm 5\%$             | 50        | 13 | 100                   | 0.38 | 0.59                    | 9.60      | 7.90          | 70               | <a href="#">MHQ1005PR47JT000</a> |          |
| 510 | $\pm 2\%$             | 50        | 13 | 100                   | 0.36 | 0.52                    | 10.2      | 8.44          | 70               | <a href="#">MHQ1005PR51GT000</a> |          |
| 510 | $\pm 3\%$             | 50        | 13 | 100                   | 0.36 | 0.52                    | 10.2      | 8.44          | 70               | <a href="#">MHQ1005PR51HT000</a> |          |
| 510 | $\pm 5\%$             | 50        | 13 | 100                   | 0.36 | 0.52                    | 10.2      | 8.44          | 70               | <a href="#">MHQ1005PR51JT000</a> |          |
| 560 | $\pm 2\%$             | 50        | 13 | 100                   | 0.36 | 0.51                    | 10.6      | 8.78          | 70               | <a href="#">MHQ1005PR56GT000</a> |          |
| 560 | $\pm 3\%$             | 50        | 13 | 100                   | 0.36 | 0.51                    | 10.6      | 8.78          | 70               | <a href="#">MHQ1005PR56HT000</a> |          |
| 560 | $\pm 5\%$             | 50        | 13 | 100                   | 0.36 | 0.51                    | 10.6      | 8.78          | 70               | <a href="#">MHQ1005PR56JT000</a> |          |

· Short bar residual inductance =0.556nH

## 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.

⚠ Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use. (7/17)  
Please note that the contents may change without any prior notice due to reasons such as upgrading.

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# MHQ1005P 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  |                                  |  |
| 0.7       | 0.7    | 0.7    | 0.7    | 0.7    | 71min. | 90min. | 139min.  | 148min. | 177min. | <a href="#">MHQ1005P0N7BT000</a> |  |
| 0.7       | 0.7    | 0.7    | 0.7    | 0.7    | 71min. | 90min. | 139min.  | 148min. | 177min. | <a href="#">MHQ1005P0N7CT000</a> |  |
| 0.8       | 0.8    | 0.8    | 0.8    | 0.8    | 71min. | 90min. | 139min.  | 148min. | 177min. | <a href="#">MHQ1005P0N8BT000</a> |  |
| 0.8       | 0.8    | 0.8    | 0.8    | 0.8    | 71min. | 90min. | 139min.  | 148min. | 177min. | <a href="#">MHQ1005P0N8CT000</a> |  |
| 0.9       | 0.9    | 0.9    | 0.9    | 0.9    | 71min. | 90min. | 139min.  | 148min. | 177min. | <a href="#">MHQ1005P0N9BT000</a> |  |
| 0.9       | 0.9    | 0.9    | 0.9    | 0.9    | 71min. | 90min. | 139min.  | 148min. | 177min. | <a href="#">MHQ1005P0N9CT000</a> |  |
| 1.0       | 1.0    | 1.0    | 1.0    | 1.0    | 71min. | 90min. | 139min.  | 148min. | 177min. | <a href="#">MHQ1005P1N0BT000</a> |  |
| 1.0       | 1.0    | 1.0    | 1.0    | 1.0    | 71min. | 90min. | 139min.  | 148min. | 177min. | <a href="#">MHQ1005P1N0CT000</a> |  |
| 1.0       | 1.0    | 1.0    | 1.0    | 1.0    | 71min. | 90min. | 139min.  | 148min. | 177min. | <a href="#">MHQ1005P1N0ST000</a> |  |
| 1.1       | 1.1    | 1.1    | 1.1    | 1.1    | 71min. | 90min. | 139min.  | 148min. | 177min. | <a href="#">MHQ1005P1N1BT000</a> |  |
| 1.1       | 1.1    | 1.1    | 1.1    | 1.1    | 71min. | 90min. | 139min.  | 148min. | 177min. | <a href="#">MHQ1005P1N1CT000</a> |  |
| 1.1       | 1.1    | 1.1    | 1.1    | 1.1    | 71min. | 90min. | 139min.  | 148min. | 177min. | <a href="#">MHQ1005P1N1ST000</a> |  |
| 1.2       | 1.2    | 1.2    | 1.2    | 1.2    | 71min. | 90min. | 139min.  | 148min. | 177min. | <a href="#">MHQ1005P1N2BT000</a> |  |
| 1.2       | 1.2    | 1.2    | 1.2    | 1.2    | 71min. | 90min. | 139min.  | 148min. | 177min. | <a href="#">MHQ1005P1N2CT000</a> |  |
| 1.2       | 1.2    | 1.2    | 1.2    | 1.2    | 71min. | 90min. | 139min.  | 148min. | 177min. | <a href="#">MHQ1005P1N2ST000</a> |  |
| 1.3       | 1.3    | 1.3    | 1.3    | 1.3    | 71     | 90     | 139      | 148     | 178     | <a href="#">MHQ1005P1N3BT000</a> |  |
| 1.3       | 1.3    | 1.3    | 1.3    | 1.3    | 71     | 90     | 139      | 148     | 178     | <a href="#">MHQ1005P1N3CT000</a> |  |
| 1.3       | 1.3    | 1.3    | 1.3    | 1.3    | 71     | 90     | 139      | 148     | 178     | <a href="#">MHQ1005P1N3ST000</a> |  |
| 1.4       | 1.4    | 1.4    | 1.4    | 1.4    | 88     | 103    | 173      | 178     | 203     | <a href="#">MHQ1005P1N4BT000</a> |  |
| 1.4       | 1.4    | 1.4    | 1.4    | 1.4    | 88     | 103    | 173      | 178     | 203     | <a href="#">MHQ1005P1N4CT000</a> |  |
| 1.4       | 1.4    | 1.4    | 1.4    | 1.4    | 88     | 103    | 173      | 178     | 203     | <a href="#">MHQ1005P1N4ST000</a> |  |
| 1.5       | 1.5    | 1.5    | 1.5    | 1.5    | 66     | 76     | 124      | 133     | 151     | <a href="#">MHQ1005P1N5BT000</a> |  |
| 1.5       | 1.5    | 1.5    | 1.5    | 1.5    | 66     | 76     | 124      | 133     | 151     | <a href="#">MHQ1005P1N5CT000</a> |  |
| 1.5       | 1.5    | 1.5    | 1.5    | 1.5    | 66     | 76     | 124      | 133     | 151     | <a href="#">MHQ1005P1N5ST000</a> |  |
| 1.6       | 1.6    | 1.6    | 1.6    | 1.6    | 70     | 88     | 147      | 151     | 171     | <a href="#">MHQ1005P1N6BT000</a> |  |
| 1.6       | 1.6    | 1.6    | 1.6    | 1.6    | 70     | 88     | 147      | 151     | 171     | <a href="#">MHQ1005P1N6CT000</a> |  |
| 1.6       | 1.6    | 1.6    | 1.6    | 1.6    | 70     | 88     | 147      | 151     | 171     | <a href="#">MHQ1005P1N6ST000</a> |  |
| 1.7       | 1.7    | 1.7    | 1.7    | 1.7    | 63     | 80     | 140      | 151     | 179     | <a href="#">MHQ1005P1N7BT000</a> |  |
| 1.7       | 1.7    | 1.7    | 1.7    | 1.7    | 63     | 80     | 140      | 151     | 179     | <a href="#">MHQ1005P1N7CT000</a> |  |
| 1.7       | 1.7    | 1.7    | 1.7    | 1.7    | 63     | 80     | 140      | 151     | 179     | <a href="#">MHQ1005P1N7ST000</a> |  |
| 1.8       | 1.8    | 1.8    | 1.8    | 1.8    | 60     | 75     | 125      | 130     | 150     | <a href="#">MHQ1005P1N8BT000</a> |  |
| 1.8       | 1.8    | 1.8    | 1.8    | 1.8    | 60     | 75     | 125      | 130     | 150     | <a href="#">MHQ1005P1N8CT000</a> |  |
| 1.8       | 1.8    | 1.8    | 1.8    | 1.8    | 60     | 75     | 125      | 130     | 150     | <a href="#">MHQ1005P1N8ST000</a> |  |
| 1.9       | 1.9    | 1.9    | 1.9    | 1.9    | 53     | 68     | 119      | 126     | 150     | <a href="#">MHQ1005P1N9BT000</a> |  |
| 1.9       | 1.9    | 1.9    | 1.9    | 1.9    | 53     | 68     | 119      | 126     | 150     | <a href="#">MHQ1005P1N9CT000</a> |  |
| 1.9       | 1.9    | 1.9    | 1.9    | 1.9    | 53     | 68     | 119      | 126     | 150     | <a href="#">MHQ1005P1N9ST000</a> |  |
| 2.0       | 2.0    | 2.0    | 2.0    | 2.0    | 60     | 74     | 122      | 129     | 146     | <a href="#">MHQ1005P2N0BT000</a> |  |
| 2.0       | 2.0    | 2.0    | 2.0    | 2.0    | 60     | 74     | 122      | 129     | 146     | <a href="#">MHQ1005P2N0CT000</a> |  |
| 2.0       | 2.0    | 2.0    | 2.0    | 2.0    | 60     | 74     | 122      | 129     | 146     | <a href="#">MHQ1005P2N0ST000</a> |  |
| 2.1       | 2.1    | 2.1    | 2.1    | 2.1    | 54     | 70     | 121      | 129     | 152     | <a href="#">MHQ1005P2N1BT000</a> |  |
| 2.1       | 2.1    | 2.1    | 2.1    | 2.1    | 54     | 70     | 121      | 129     | 152     | <a href="#">MHQ1005P2N1CT000</a> |  |
| 2.1       | 2.1    | 2.1    | 2.1    | 2.1    | 54     | 70     | 121      | 129     | 152     | <a href="#">MHQ1005P2N1ST000</a> |  |
| 2.2       | 2.2    | 2.2    | 2.2    | 2.2    | 54     | 68     | 108      | 116     | 131     | <a href="#">MHQ1005P2N2BT000</a> |  |
| 2.2       | 2.2    | 2.2    | 2.2    | 2.2    | 54     | 68     | 108      | 116     | 131     | <a href="#">MHQ1005P2N2CT000</a> |  |
| 2.2       | 2.2    | 2.2    | 2.2    | 2.2    | 54     | 68     | 108      | 116     | 131     | <a href="#">MHQ1005P2N2ST000</a> |  |

### Measurement equipment

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

\* Equivalent measurement equipment may be used.



# MHQ1005P type

## L, Q FREQUENCY CHARACTERISTICS TABLE

| L(nH)typ. |        |        |        |        | Q typ. |        |        |        |        | Part No.                         |
|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------------------------------|
| 500MHz    | 800MHz | 1.8GHz | 2.0GHz | 2.4GHz | 500MHz | 800MHz | 1.8GHz | 2.0GHz | 2.4GHz |                                  |
| 2.3       | 2.3    | 2.3    | 2.3    | 2.3    | 50     | 64     | 101    | 106    | 119    | <a href="#">MHQ1005P2N3BT000</a> |
| 2.3       | 2.3    | 2.3    | 2.3    | 2.3    | 50     | 64     | 101    | 106    | 119    | <a href="#">MHQ1005P2N3CT000</a> |
| 2.3       | 2.3    | 2.3    | 2.3    | 2.3    | 50     | 64     | 101    | 106    | 119    | <a href="#">MHQ1005P2N3ST000</a> |
| 2.4       | 2.3    | 2.4    | 2.4    | 2.4    | 50     | 64     | 105    | 110    | 125    | <a href="#">MHQ1005P2N4BT000</a> |
| 2.4       | 2.3    | 2.4    | 2.4    | 2.4    | 50     | 64     | 105    | 110    | 125    | <a href="#">MHQ1005P2N4CT000</a> |
| 2.4       | 2.3    | 2.4    | 2.4    | 2.4    | 50     | 64     | 105    | 110    | 125    | <a href="#">MHQ1005P2N4ST000</a> |
| 2.5       | 2.5    | 2.5    | 2.5    | 2.6    | 50     | 65     | 110    | 114    | 135    | <a href="#">MHQ1005P2N5BT000</a> |
| 2.5       | 2.5    | 2.5    | 2.5    | 2.6    | 50     | 65     | 110    | 114    | 135    | <a href="#">MHQ1005P2N5CT000</a> |
| 2.5       | 2.5    | 2.5    | 2.5    | 2.6    | 50     | 65     | 110    | 114    | 135    | <a href="#">MHQ1005P2N5ST000</a> |
| 2.5       | 2.5    | 2.6    | 2.6    | 2.7    | 48     | 65     | 103    | 107    | 122    | <a href="#">MHQ1005P2N6BT000</a> |
| 2.5       | 2.5    | 2.6    | 2.6    | 2.7    | 48     | 65     | 103    | 107    | 122    | <a href="#">MHQ1005P2N6CT000</a> |
| 2.5       | 2.5    | 2.6    | 2.6    | 2.7    | 48     | 65     | 103    | 107    | 122    | <a href="#">MHQ1005P2N6ST000</a> |
| 2.6       | 2.6    | 2.7    | 2.7    | 2.8    | 49     | 61     | 98     | 102    | 116    | <a href="#">MHQ1005P2N7BT000</a> |
| 2.6       | 2.6    | 2.7    | 2.7    | 2.8    | 49     | 61     | 98     | 102    | 116    | <a href="#">MHQ1005P2N7CT000</a> |
| 2.6       | 2.6    | 2.7    | 2.7    | 2.8    | 49     | 61     | 98     | 102    | 116    | <a href="#">MHQ1005P2N7ST000</a> |
| 2.7       | 2.7    | 2.8    | 2.8    | 2.9    | 46     | 58     | 100    | 105    | 123    | <a href="#">MHQ1005P2N8BT000</a> |
| 2.7       | 2.7    | 2.8    | 2.8    | 2.9    | 46     | 58     | 100    | 105    | 123    | <a href="#">MHQ1005P2N8CT000</a> |
| 2.7       | 2.7    | 2.8    | 2.8    | 2.9    | 46     | 58     | 100    | 105    | 123    | <a href="#">MHQ1005P2N8ST000</a> |
| 2.8       | 2.8    | 2.9    | 2.9    | 3.0    | 45     | 58     | 99     | 103    | 120    | <a href="#">MHQ1005P2N9BT000</a> |
| 2.8       | 2.8    | 2.9    | 2.9    | 3.0    | 45     | 58     | 99     | 103    | 120    | <a href="#">MHQ1005P2N9CT000</a> |
| 2.8       | 2.8    | 2.9    | 2.9    | 3.0    | 45     | 58     | 99     | 103    | 120    | <a href="#">MHQ1005P2N9ST000</a> |
| 2.9       | 2.9    | 3.0    | 3.0    | 3.1    | 49     | 62     | 102    | 106    | 120    | <a href="#">MHQ1005P3N0BT000</a> |
| 2.9       | 2.9    | 3.0    | 3.0    | 3.1    | 49     | 62     | 102    | 106    | 120    | <a href="#">MHQ1005P3N0CT000</a> |
| 2.9       | 2.9    | 3.0    | 3.0    | 3.1    | 49     | 62     | 102    | 106    | 120    | <a href="#">MHQ1005P3N0ST000</a> |
| 3.0       | 3.0    | 3.1    | 3.1    | 3.2    | 45     | 58     | 99     | 104    | 121    | <a href="#">MHQ1005P3N1BT000</a> |
| 3.0       | 3.0    | 3.1    | 3.1    | 3.2    | 45     | 58     | 99     | 104    | 121    | <a href="#">MHQ1005P3N1CT000</a> |
| 3.0       | 3.0    | 3.1    | 3.1    | 3.2    | 45     | 58     | 99     | 104    | 121    | <a href="#">MHQ1005P3N1ST000</a> |
| 3.1       | 3.1    | 3.2    | 3.2    | 3.3    | 45     | 58     | 99     | 106    | 121    | <a href="#">MHQ1005P3N2BT000</a> |
| 3.1       | 3.1    | 3.2    | 3.2    | 3.3    | 45     | 58     | 99     | 106    | 121    | <a href="#">MHQ1005P3N2CT000</a> |
| 3.1       | 3.1    | 3.2    | 3.2    | 3.3    | 45     | 58     | 99     | 106    | 121    | <a href="#">MHQ1005P3N2ST000</a> |
| 3.2       | 3.2    | 3.3    | 3.4    | 3.4    | 48     | 60     | 96     | 101    | 115    | <a href="#">MHQ1005P3N3BT000</a> |
| 3.2       | 3.2    | 3.3    | 3.4    | 3.4    | 48     | 60     | 96     | 101    | 115    | <a href="#">MHQ1005P3N3CT000</a> |
| 3.2       | 3.2    | 3.3    | 3.4    | 3.4    | 48     | 60     | 96     | 101    | 115    | <a href="#">MHQ1005P3N3ST000</a> |
| 3.3       | 3.3    | 3.4    | 3.5    | 3.5    | 45     | 57     | 96     | 102    | 118    | <a href="#">MHQ1005P3N4BT000</a> |
| 3.3       | 3.3    | 3.4    | 3.5    | 3.5    | 45     | 57     | 96     | 102    | 118    | <a href="#">MHQ1005P3N4CT000</a> |
| 3.3       | 3.3    | 3.4    | 3.5    | 3.5    | 45     | 57     | 96     | 102    | 118    | <a href="#">MHQ1005P3N4ST000</a> |
| 3.4       | 3.4    | 3.5    | 3.6    | 3.6    | 43     | 57     | 89     | 92     | 104    | <a href="#">MHQ1005P3N5BT000</a> |
| 3.4       | 3.4    | 3.5    | 3.6    | 3.6    | 43     | 57     | 89     | 92     | 104    | <a href="#">MHQ1005P3N5CT000</a> |
| 3.4       | 3.4    | 3.5    | 3.6    | 3.6    | 43     | 57     | 89     | 92     | 104    | <a href="#">MHQ1005P3N5ST000</a> |
| 3.5       | 3.5    | 3.6    | 3.6    | 3.7    | 43     | 56     | 91     | 96     | 110    | <a href="#">MHQ1005P3N6BT000</a> |
| 3.5       | 3.5    | 3.6    | 3.6    | 3.7    | 43     | 56     | 91     | 96     | 110    | <a href="#">MHQ1005P3N6CT000</a> |
| 3.5       | 3.5    | 3.6    | 3.6    | 3.7    | 43     | 56     | 91     | 96     | 110    | <a href="#">MHQ1005P3N6ST000</a> |
| 3.6       | 3.6    | 3.7    | 3.8    | 3.9    | 46     | 57     | 96     | 100    | 114    | <a href="#">MHQ1005P3N7BT000</a> |
| 3.6       | 3.6    | 3.7    | 3.8    | 3.9    | 46     | 57     | 96     | 100    | 114    | <a href="#">MHQ1005P3N7CT000</a> |
| 3.6       | 3.6    | 3.7    | 3.8    | 3.9    | 46     | 57     | 96     | 100    | 114    | <a href="#">MHQ1005P3N7ST000</a> |
| 3.7       | 3.7    | 3.9    | 3.9    | 4.0    | 45     | 59     | 93     | 96     | 109    | <a href="#">MHQ1005P3N8BT000</a> |
| 3.7       | 3.7    | 3.9    | 3.9    | 4.0    | 45     | 59     | 93     | 96     | 109    | <a href="#">MHQ1005P3N8CT000</a> |
| 3.7       | 3.7    | 3.9    | 3.9    | 4.0    | 45     | 59     | 93     | 96     | 109    | <a href="#">MHQ1005P3N8ST000</a> |

### Measurement equipment

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

\* Equivalent measurement equipment may be used.

# MHQ1005P 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 |                                  |
| 3.8       | 3.8    | 4.0    | 4.0    | 4.1    | 48     | 61     | 96     | 99     | 111    | <a href="#">MHQ1005P3N9BT000</a> |
| 3.8       | 3.8    | 4.0    | 4.0    | 4.1    | 48     | 61     | 96     | 99     | 111    | <a href="#">MHQ1005P3N9CT000</a> |
| 3.8       | 3.8    | 4.0    | 4.0    | 4.1    | 48     | 61     | 96     | 99     | 111    | <a href="#">MHQ1005P3N9ST000</a> |
| 4.0       | 4.0    | 4.2    | 4.3    | 4.4    | 46     | 59     | 98     | 101    | 115    | <a href="#">MHQ1005P4N1BT000</a> |
| 4.0       | 4.0    | 4.2    | 4.3    | 4.4    | 46     | 59     | 98     | 101    | 115    | <a href="#">MHQ1005P4N1CT000</a> |
| 4.0       | 4.0    | 4.2    | 4.3    | 4.4    | 46     | 59     | 98     | 101    | 115    | <a href="#">MHQ1005P4N1ST000</a> |
| 4.2       | 4.2    | 4.4    | 4.5    | 4.6    | 47     | 60     | 95     | 97     | 107    | <a href="#">MHQ1005P4N3BT000</a> |
| 4.2       | 4.2    | 4.4    | 4.5    | 4.6    | 47     | 60     | 95     | 97     | 107    | <a href="#">MHQ1005P4N3CT000</a> |
| 4.2       | 4.2    | 4.4    | 4.5    | 4.6    | 47     | 60     | 95     | 97     | 107    | <a href="#">MHQ1005P4N3ST000</a> |
| 4.6       | 4.6    | 4.8    | 4.9    | 5.0    | 44     | 56     | 89     | 93     | 102    | <a href="#">MHQ1005P4N7BT000</a> |
| 4.6       | 4.6    | 4.8    | 4.9    | 5.0    | 44     | 56     | 89     | 93     | 102    | <a href="#">MHQ1005P4N7CT000</a> |
| 4.6       | 4.6    | 4.8    | 4.9    | 5.0    | 44     | 56     | 89     | 93     | 102    | <a href="#">MHQ1005P4N7ST000</a> |
| 5.0       | 5.0    | 5.2    | 5.3    | 5.5    | 43     | 55     | 86     | 90     | 99     | <a href="#">MHQ1005P5N1BT000</a> |
| 5.0       | 5.0    | 5.2    | 5.3    | 5.5    | 43     | 55     | 86     | 90     | 99     | <a href="#">MHQ1005P5N1CT000</a> |
| 5.0       | 5.0    | 5.2    | 5.3    | 5.5    | 43     | 55     | 86     | 90     | 99     | <a href="#">MHQ1005P5N1ST000</a> |
| 5.5       | 5.5    | 5.8    | 5.9    | 6.1    | 43     | 54     | 84     | 87     | 94     | <a href="#">MHQ1005P5N6BT000</a> |
| 5.5       | 5.5    | 5.8    | 5.9    | 6.1    | 43     | 54     | 84     | 87     | 94     | <a href="#">MHQ1005P5N6CT000</a> |
| 5.5       | 5.5    | 5.8    | 5.9    | 6.1    | 43     | 54     | 84     | 87     | 94     | <a href="#">MHQ1005P5N6ST000</a> |
| 5.7       | 5.7    | 6.1    | 6.2    | 6.5    | 43     | 57     | 84     | 87     | 94     | <a href="#">MHQ1005P5N8BT000</a> |
| 5.7       | 5.7    | 6.1    | 6.2    | 6.5    | 43     | 57     | 84     | 87     | 94     | <a href="#">MHQ1005P5N8CT000</a> |
| 5.7       | 5.7    | 6.1    | 6.2    | 6.5    | 43     | 57     | 84     | 87     | 94     | <a href="#">MHQ1005P5N8ST000</a> |
| 6.1       | 6.1    | 6.6    | 6.7    | 7.0    | 45     | 57     | 85     | 87     | 93     | <a href="#">MHQ1005P6N2BT000</a> |
| 6.1       | 6.1    | 6.6    | 6.7    | 7.0    | 45     | 57     | 85     | 87     | 93     | <a href="#">MHQ1005P6N2CT000</a> |
| 6.1       | 6.1    | 6.6    | 6.7    | 7.0    | 45     | 57     | 85     | 87     | 93     | <a href="#">MHQ1005P6N2ST000</a> |
| 6.7       | 6.7    | 7.3    | 7.5    | 7.9    | 45     | 58     | 85     | 88     | 92     | <a href="#">MHQ1005P6N8GT000</a> |
| 6.7       | 6.7    | 7.3    | 7.5    | 7.9    | 45     | 58     | 85     | 88     | 92     | <a href="#">MHQ1005P6N8HT000</a> |
| 6.7       | 6.7    | 7.3    | 7.5    | 7.9    | 45     | 58     | 85     | 88     | 92     | <a href="#">MHQ1005P6N8JT000</a> |
| 7.1       | 7.2    | 7.7    | 7.9    | 8.3    | 40     | 52     | 77     | 80     | 84     | <a href="#">MHQ1005P7N3GT000</a> |
| 7.1       | 7.2    | 7.7    | 7.9    | 8.3    | 40     | 52     | 77     | 80     | 84     | <a href="#">MHQ1005P7N3HT000</a> |
| 7.1       | 7.2    | 7.7    | 7.9    | 8.3    | 40     | 52     | 77     | 80     | 84     | <a href="#">MHQ1005P7N3JT000</a> |
| 7.3       | 7.4    | 7.9    | 8.1    | 8.5    | 42     | 54     | 80     | 83     | 88     | <a href="#">MHQ1005P7N5GT000</a> |
| 7.3       | 7.4    | 7.9    | 8.1    | 8.5    | 42     | 54     | 80     | 83     | 88     | <a href="#">MHQ1005P7N5HT000</a> |
| 7.3       | 7.4    | 7.9    | 8.1    | 8.5    | 42     | 54     | 80     | 83     | 88     | <a href="#">MHQ1005P7N5JT000</a> |
| 8.0       | 8.1    | 9.0    | 9.4    | 10.0   | 44     | 56     | 80     | 81     | 82     | <a href="#">MHQ1005P8N2GT000</a> |
| 8.0       | 8.1    | 9.0    | 9.4    | 10.0   | 44     | 56     | 80     | 81     | 82     | <a href="#">MHQ1005P8N2HT000</a> |
| 8.0       | 8.1    | 9.0    | 9.4    | 10.0   | 44     | 56     | 80     | 81     | 82     | <a href="#">MHQ1005P8N2JT000</a> |
| 8.5       | 8.6    | 9.6    | 10.0   | 10.8   | 42     | 52     | 78     | 79     | 80     | <a href="#">MHQ1005P8N7GT000</a> |
| 8.5       | 8.6    | 9.6    | 10.0   | 10.8   | 42     | 52     | 78     | 79     | 80     | <a href="#">MHQ1005P8N7HT000</a> |
| 8.5       | 8.6    | 9.6    | 10.0   | 10.8   | 42     | 52     | 78     | 79     | 80     | <a href="#">MHQ1005P8N7JT000</a> |
| 8.9       | 9.1    | 10.1   | 10.5   | 11.3   | 43     | 54     | 77     | 78     | 79     | <a href="#">MHQ1005P9N1GT000</a> |
| 8.9       | 9.1    | 10.1   | 10.5   | 11.3   | 43     | 54     | 77     | 78     | 79     | <a href="#">MHQ1005P9N1HT000</a> |
| 8.9       | 9.1    | 10.1   | 10.5   | 11.3   | 43     | 54     | 77     | 78     | 79     | <a href="#">MHQ1005P9N1JT000</a> |

### Measurement equipment

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

\* Equivalent measurement equipment may be used.

# MHQ1005P 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 |                                  |
| 9.3       | 9.4    | 10.6   | 11.1   | 12.0   | 42     | 54     | 75     | 75     | 75     | <a href="#">MHQ1005P9N5GT000</a> |
| 9.3       | 9.4    | 10.6   | 11.1   | 12.0   | 42     | 54     | 75     | 75     | 75     | <a href="#">MHQ1005P9N5HT000</a> |
| 9.3       | 9.4    | 10.6   | 11.1   | 12.0   | 42     | 54     | 75     | 75     | 75     | <a href="#">MHQ1005P9N5JT000</a> |
| 10        | 10     | 11     | 12     | 13     | 42     | 54     | 73     | 74     | 74     | <a href="#">MHQ1005P10NGT000</a> |
| 10        | 10     | 11     | 12     | 13     | 42     | 54     | 73     | 74     | 74     | <a href="#">MHQ1005P10NHT000</a> |
| 10        | 10     | 11     | 12     | 13     | 42     | 54     | 73     | 74     | 74     | <a href="#">MHQ1005P10NJT000</a> |
| 11        | 11     | 13     | 13     | 14     | 41     | 52     | 70     | 70     | 69     | <a href="#">MHQ1005P11NGT000</a> |
| 11        | 11     | 13     | 13     | 14     | 41     | 52     | 70     | 70     | 69     | <a href="#">MHQ1005P11NHT000</a> |
| 11        | 11     | 13     | 13     | 14     | 41     | 52     | 70     | 70     | 69     | <a href="#">MHQ1005P11NJT000</a> |
| 12        | 12     | 14     | 15     | 17     | 40     | 50     | 66     | 65     | 61     | <a href="#">MHQ1005P12NGT000</a> |
| 12        | 12     | 14     | 15     | 17     | 40     | 50     | 66     | 65     | 61     | <a href="#">MHQ1005P12NHT000</a> |
| 12        | 12     | 14     | 15     | 17     | 40     | 50     | 66     | 65     | 61     | <a href="#">MHQ1005P12NJT000</a> |
| 13        | 13     | 16     | 17     | 19     | 42     | 53     | 66     | 66     | 61     | <a href="#">MHQ1005P13NGT000</a> |
| 13        | 13     | 16     | 17     | 19     | 42     | 53     | 66     | 66     | 61     | <a href="#">MHQ1005P13NHT000</a> |
| 13        | 13     | 16     | 17     | 19     | 42     | 53     | 66     | 66     | 61     | <a href="#">MHQ1005P13NJT000</a> |
| 15        | 15     | 19     | 21     | 26     | 39     | 48     | 57     | 54     | 46     | <a href="#">MHQ1005P15NGT000</a> |
| 15        | 15     | 19     | 21     | 26     | 39     | 48     | 57     | 54     | 46     | <a href="#">MHQ1005P15NHT000</a> |
| 15        | 15     | 19     | 21     | 26     | 39     | 48     | 57     | 54     | 46     | <a href="#">MHQ1005P15NJT000</a> |
| 16        | 16     | 20     | 21     | 25     | 34     | 43     | 54     | 52     | 49     | <a href="#">MHQ1005P16NGT000</a> |
| 16        | 16     | 20     | 21     | 25     | 34     | 43     | 54     | 52     | 49     | <a href="#">MHQ1005P16NHT000</a> |
| 16        | 16     | 20     | 21     | 25     | 34     | 43     | 54     | 52     | 49     | <a href="#">MHQ1005P16NJT000</a> |
| 18        | 18     | 23     | 25     | 30     | 39     | 49     | 60     | 57     | 51     | <a href="#">MHQ1005P18NGT000</a> |
| 18        | 18     | 23     | 25     | 30     | 39     | 49     | 60     | 57     | 51     | <a href="#">MHQ1005P18NHT000</a> |
| 18        | 18     | 23     | 25     | 30     | 39     | 49     | 60     | 57     | 51     | <a href="#">MHQ1005P18NJT000</a> |
| 19        | 19     | 25     | 28     | 35     | 39     | 49     | 59     | 55     | 46     | <a href="#">MHQ1005P19NGT000</a> |
| 19        | 19     | 25     | 28     | 35     | 39     | 49     | 59     | 55     | 46     | <a href="#">MHQ1005P19NHT000</a> |
| 19        | 19     | 25     | 28     | 35     | 39     | 49     | 59     | 55     | 46     | <a href="#">MHQ1005P19NJT000</a> |
| 20        | 20     | 26     | 29     | 35     | 38     | 47     | 56     | 53     | 43     | <a href="#">MHQ1005P20NGT000</a> |
| 20        | 20     | 26     | 29     | 35     | 38     | 47     | 56     | 53     | 43     | <a href="#">MHQ1005P20NHT000</a> |
| 20        | 20     | 26     | 29     | 35     | 38     | 47     | 56     | 53     | 43     | <a href="#">MHQ1005P20NJT000</a> |
| 22        | 23     | 31     | 35     | —      | 34     | 42     | 47     | 43     | —      | <a href="#">MHQ1005P22NGT000</a> |
| 22        | 23     | 31     | 35     | —      | 34     | 42     | 47     | 43     | —      | <a href="#">MHQ1005P22NHT000</a> |
| 22        | 23     | 31     | 35     | —      | 34     | 42     | 47     | 43     | —      | <a href="#">MHQ1005P22NJT000</a> |
| 23        | 24     | 33     | 37     | —      | 41     | 50     | 53     | 48     | —      | <a href="#">MHQ1005P23NGT000</a> |
| 23        | 24     | 33     | 37     | —      | 41     | 50     | 53     | 48     | —      | <a href="#">MHQ1005P23NHT000</a> |
| 23        | 24     | 33     | 37     | —      | 41     | 50     | 53     | 48     | —      | <a href="#">MHQ1005P23NJT000</a> |
| 24        | 25     | 35     | 41     | —      | 39     | 49     | 50     | 44     | —      | <a href="#">MHQ1005P24NGT000</a> |
| 24        | 25     | 35     | 41     | —      | 39     | 49     | 50     | 44     | —      | <a href="#">MHQ1005P24NHT000</a> |
| 24        | 25     | 35     | 41     | —      | 39     | 49     | 50     | 44     | —      | <a href="#">MHQ1005P24NJT000</a> |
| 27        | 28     | 42     | 50     | —      | 37     | 45     | 44     | 37     | —      | <a href="#">MHQ1005P27NGT000</a> |
| 27        | 28     | 42     | 50     | —      | 37     | 45     | 44     | 37     | —      | <a href="#">MHQ1005P27NHT000</a> |
| 27        | 28     | 42     | 50     | —      | 37     | 45     | 44     | 37     | —      | <a href="#">MHQ1005P27NJT000</a> |
| 30        | 32     | 55     | —      | —      | 33     | 40     | 34     | —      | —      | <a href="#">MHQ1005P30NGT000</a> |
| 30        | 32     | 55     | —      | —      | 33     | 40     | 34     | —      | —      | <a href="#">MHQ1005P30NHT000</a> |
| 30        | 32     | 55     | —      | —      | 33     | 40     | 34     | —      | —      | <a href="#">MHQ1005P30NJT000</a> |

### Measurement equipment

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

\* Equivalent measurement equipment may be used.

# MHQ1005P 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 |                                  |
| 33        | 35     | 59     | —      | —      | 37     | 44     | 37     | —      | —      | <a href="#">MHQ1005P33NGT000</a> |
| 33        | 35     | 59     | —      | —      | 37     | 44     | 37     | —      | —      | <a href="#">MHQ1005P33NHT000</a> |
| 33        | 35     | 59     | —      | —      | 37     | 44     | 37     | —      | —      | <a href="#">MHQ1005P33NJT000</a> |
| 36        | 39     | 69     | —      | —      | 35     | 42     | 32     | —      | —      | <a href="#">MHQ1005P36NGT000</a> |
| 36        | 39     | 69     | —      | —      | 35     | 42     | 32     | —      | —      | <a href="#">MHQ1005P36NHT000</a> |
| 36        | 39     | 69     | —      | —      | 35     | 42     | 32     | —      | —      | <a href="#">MHQ1005P36NJT000</a> |
| 40        | 43     | —      | —      | —      | 33     | 38     | —      | —      | —      | <a href="#">MHQ1005P39NGT000</a> |
| 40        | 43     | —      | —      | —      | 33     | 38     | —      | —      | —      | <a href="#">MHQ1005P39NHT000</a> |
| 40        | 43     | —      | —      | —      | 33     | 38     | —      | —      | —      | <a href="#">MHQ1005P39NJT000</a> |
| 41        | 44     | —      | —      | —      | 36     | 42     | —      | —      | —      | <a href="#">MHQ1005P40NGT000</a> |
| 41        | 44     | —      | —      | —      | 36     | 42     | —      | —      | —      | <a href="#">MHQ1005P40NHT000</a> |
| 41        | 44     | —      | —      | —      | 36     | 42     | —      | —      | —      | <a href="#">MHQ1005P40NJT000</a> |
| 44        | 47     | —      | —      | —      | 36     | 42     | —      | —      | —      | <a href="#">MHQ1005P43NGT000</a> |
| 44        | 47     | —      | —      | —      | 36     | 42     | —      | —      | —      | <a href="#">MHQ1005P43NHT000</a> |
| 44        | 47     | —      | —      | —      | 36     | 42     | —      | —      | —      | <a href="#">MHQ1005P43NJT000</a> |
| 48        | 53     | —      | —      | —      | 34     | 38     | —      | —      | —      | <a href="#">MHQ1005P47NGT000</a> |
| 48        | 53     | —      | —      | —      | 34     | 38     | —      | —      | —      | <a href="#">MHQ1005P47NHT000</a> |
| 48        | 53     | —      | —      | —      | 34     | 38     | —      | —      | —      | <a href="#">MHQ1005P47NJT000</a> |
| 52        | 58     | —      | —      | —      | 35     | 40     | —      | —      | —      | <a href="#">MHQ1005P51NGT000</a> |
| 52        | 58     | —      | —      | —      | 35     | 40     | —      | —      | —      | <a href="#">MHQ1005P51NHT000</a> |
| 52        | 58     | —      | —      | —      | 35     | 40     | —      | —      | —      | <a href="#">MHQ1005P51NJT000</a> |
| 58        | 65     | —      | —      | —      | 34     | 37     | —      | —      | —      | <a href="#">MHQ1005P56NGT000</a> |
| 58        | 65     | —      | —      | —      | 34     | 37     | —      | —      | —      | <a href="#">MHQ1005P56NHT000</a> |
| 58        | 65     | —      | —      | —      | 34     | 37     | —      | —      | —      | <a href="#">MHQ1005P56NJT000</a> |
| 65        | 74     | —      | —      | —      | 34     | 37     | —      | —      | —      | <a href="#">MHQ1005P62NGT000</a> |
| 65        | 74     | —      | —      | —      | 34     | 37     | —      | —      | —      | <a href="#">MHQ1005P62NHT000</a> |
| 65        | 74     | —      | —      | —      | 34     | 37     | —      | —      | —      | <a href="#">MHQ1005P62NJT000</a> |
| 72        | 82     | —      | —      | —      | 35     | 37     | —      | —      | —      | <a href="#">MHQ1005P68NGT000</a> |
| 72        | 82     | —      | —      | —      | 35     | 37     | —      | —      | —      | <a href="#">MHQ1005P68NHT000</a> |
| 72        | 82     | —      | —      | —      | 35     | 37     | —      | —      | —      | <a href="#">MHQ1005P68NJT000</a> |
| 77        | 90     | —      | —      | —      | 34     | 36     | —      | —      | —      | <a href="#">MHQ1005P72NGT000</a> |
| 77        | 90     | —      | —      | —      | 34     | 36     | —      | —      | —      | <a href="#">MHQ1005P72NHT000</a> |
| 77        | 90     | —      | —      | —      | 34     | 36     | —      | —      | —      | <a href="#">MHQ1005P72NJT000</a> |
| 80        | 93     | —      | —      | —      | 35     | 37     | —      | —      | —      | <a href="#">MHQ1005P75NGT000</a> |
| 80        | 93     | —      | —      | —      | 35     | 37     | —      | —      | —      | <a href="#">MHQ1005P75NHT000</a> |
| 80        | 93     | —      | —      | —      | 35     | 37     | —      | —      | —      | <a href="#">MHQ1005P75NJT000</a> |
| 88        | 107    | —      | —      | —      | 35     | 35     | —      | —      | —      | <a href="#">MHQ1005P82NGT000</a> |
| 88        | 107    | —      | —      | —      | 35     | 35     | —      | —      | —      | <a href="#">MHQ1005P82NHT000</a> |
| 88        | 107    | —      | —      | —      | 35     | 35     | —      | —      | —      | <a href="#">MHQ1005P82NJT000</a> |
| 98        | 121    | —      | —      | —      | 33     | 32     | —      | —      | —      | <a href="#">MHQ1005P91NGT000</a> |
| 98        | 121    | —      | —      | —      | 33     | 32     | —      | —      | —      | <a href="#">MHQ1005P91NHT000</a> |
| 98        | 121    | —      | —      | —      | 33     | 32     | —      | —      | —      | <a href="#">MHQ1005P91NJT000</a> |
| 111       | 143    | —      | —      | —      | 33     | 33     | —      | —      | —      | <a href="#">MHQ1005PR10GT000</a> |
| 111       | 143    | —      | —      | —      | 33     | 33     | —      | —      | —      | <a href="#">MHQ1005PR10HT000</a> |
| 111       | 143    | —      | —      | —      | 33     | 33     | —      | —      | —      | <a href="#">MHQ1005PR10JT000</a> |

### Measurement equipment

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

\* Equivalent measurement equipment may be used.

## MHQ1005P 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 |                  |
| 124       | 169    | —      | —      | —      | 31     | 28     | —      | —      | —      | MHQ1005PR11GT000 |
| 124       | 169    | —      | —      | —      | 31     | 28     | —      | —      | —      | MHQ1005PR11HT000 |
| 124       | 169    | —      | —      | —      | 31     | 28     | —      | —      | —      | MHQ1005PR11JT000 |
| 138       | 197    | —      | —      | —      | 30     | 26     | —      | —      | —      | MHQ1005PR12GT000 |
| 138       | 197    | —      | —      | —      | 30     | 26     | —      | —      | —      | MHQ1005PR12HT000 |
| 138       | 197    | —      | —      | —      | 30     | 26     | —      | —      | —      | MHQ1005PR12JT000 |
| 150       | 220    | —      | —      | —      | 31     | 23     | —      | —      | —      | MHQ1005PR13GT000 |
| 150       | 220    | —      | —      | —      | 31     | 23     | —      | —      | —      | MHQ1005PR13HT000 |
| 150       | 220    | —      | —      | —      | 31     | 23     | —      | —      | —      | MHQ1005PR13JT000 |
| 177       | 276    | —      | —      | —      | 30     | 22     | —      | —      | —      | MHQ1005PR15GT000 |
| 177       | 276    | —      | —      | —      | 30     | 22     | —      | —      | —      | MHQ1005PR15HT000 |
| 177       | 276    | —      | —      | —      | 30     | 22     | —      | —      | —      | MHQ1005PR15JT000 |
| 194       | —      | —      | —      | —      | 28     | —      | —      | —      | —      | MHQ1005PR16GT000 |
| 194       | —      | —      | —      | —      | 28     | —      | —      | —      | —      | MHQ1005PR16HT000 |
| 194       | —      | —      | —      | —      | 28     | —      | —      | —      | —      | MHQ1005PR16JT000 |
| 223       | —      | —      | —      | —      | 28     | —      | —      | —      | —      | MHQ1005PR18GT000 |
| 223       | —      | —      | —      | —      | 28     | —      | —      | —      | —      | MHQ1005PR18HT000 |
| 223       | —      | —      | —      | —      | 28     | —      | —      | —      | —      | MHQ1005PR18JT000 |
| 254       | —      | —      | —      | —      | 27     | —      | —      | —      | —      | MHQ1005PR20GT000 |
| 254       | —      | —      | —      | —      | 27     | —      | —      | —      | —      | MHQ1005PR20HT000 |
| 254       | —      | —      | —      | —      | 27     | —      | —      | —      | —      | MHQ1005PR20JT000 |
| 285       | —      | —      | —      | —      | 27     | —      | —      | —      | —      | MHQ1005PR22GT000 |
| 285       | —      | —      | —      | —      | 27     | —      | —      | —      | —      | MHQ1005PR22HT000 |
| 285       | —      | —      | —      | —      | 27     | —      | —      | —      | —      | MHQ1005PR22JT000 |
| 317       | —      | —      | —      | —      | 26     | —      | —      | —      | —      | MHQ1005PR24GT000 |
| 317       | —      | —      | —      | —      | 26     | —      | —      | —      | —      | MHQ1005PR24HT000 |
| 317       | —      | —      | —      | —      | 26     | —      | —      | —      | —      | MHQ1005PR24JT000 |
| 375       | —      | —      | —      | —      | 25     | —      | —      | —      | —      | MHQ1005PR27GT000 |
| 375       | —      | —      | —      | —      | 25     | —      | —      | —      | —      | MHQ1005PR27HT000 |
| 375       | —      | —      | —      | —      | 25     | —      | —      | —      | —      | MHQ1005PR27JT000 |
| 448       | —      | —      | —      | —      | 23     | —      | —      | —      | —      | MHQ1005PR30GT000 |
| 448       | —      | —      | —      | —      | 23     | —      | —      | —      | —      | MHQ1005PR30HT000 |
| 448       | —      | —      | —      | —      | 23     | —      | —      | —      | —      | MHQ1005PR30JT000 |
| 518       | —      | —      | —      | —      | 22     | —      | —      | —      | —      | MHQ1005PR33GT000 |
| 518       | —      | —      | —      | —      | 22     | —      | —      | —      | —      | MHQ1005PR33HT000 |
| 518       | —      | —      | —      | —      | 22     | —      | —      | —      | —      | MHQ1005PR33JT000 |
| 599       | —      | —      | —      | —      | 21     | —      | —      | —      | —      | MHQ1005PR36GT000 |
| 599       | —      | —      | —      | —      | 21     | —      | —      | —      | —      | MHQ1005PR36HT000 |
| 599       | —      | —      | —      | —      | 21     | —      | —      | —      | —      | MHQ1005PR36JT000 |
| 693       | —      | —      | —      | —      | 19     | —      | —      | —      | —      | MHQ1005PR39GT000 |
| 693       | —      | —      | —      | —      | 19     | —      | —      | —      | —      | MHQ1005PR39HT000 |
| 693       | —      | —      | —      | —      | 19     | —      | —      | —      | —      | MHQ1005PR39JT000 |
| —         | —      | —      | —      | —      | —      | —      | —      | —      | —      | MHQ1005PR43GT000 |
| —         | —      | —      | —      | —      | —      | —      | —      | —      | —      | MHQ1005PR43HT000 |
| —         | —      | —      | —      | —      | —      | —      | —      | —      | —      | MHQ1005PR43JT000 |
| —         | —      | —      | —      | —      | —      | —      | —      | —      | —      | MHQ1005PR47GT000 |
| —         | —      | —      | —      | —      | —      | —      | —      | —      | —      | MHQ1005PR47HT000 |
| —         | —      | —      | —      | —      | —      | —      | —      | —      | —      | MHQ1005PR47JT000 |
| —         | —      | —      | —      | —      | —      | —      | —      | —      | —      | MHQ1005PR51GT000 |
| —         | —      | —      | —      | —      | —      | —      | —      | —      | —      | MHQ1005PR51HT000 |
| —         | —      | —      | —      | —      | —      | —      | —      | —      | —      | MHQ1005PR51JT000 |
| —         | —      | —      | —      | —      | —      | —      | —      | —      | —      | MHQ1005PR56GT000 |
| —         | —      | —      | —      | —      | —      | —      | —      | —      | —      | MHQ1005PR56HT000 |
| —         | —      | —      | —      | —      | —      | —      | —      | —      | —      | MHQ1005PR56JT000 |

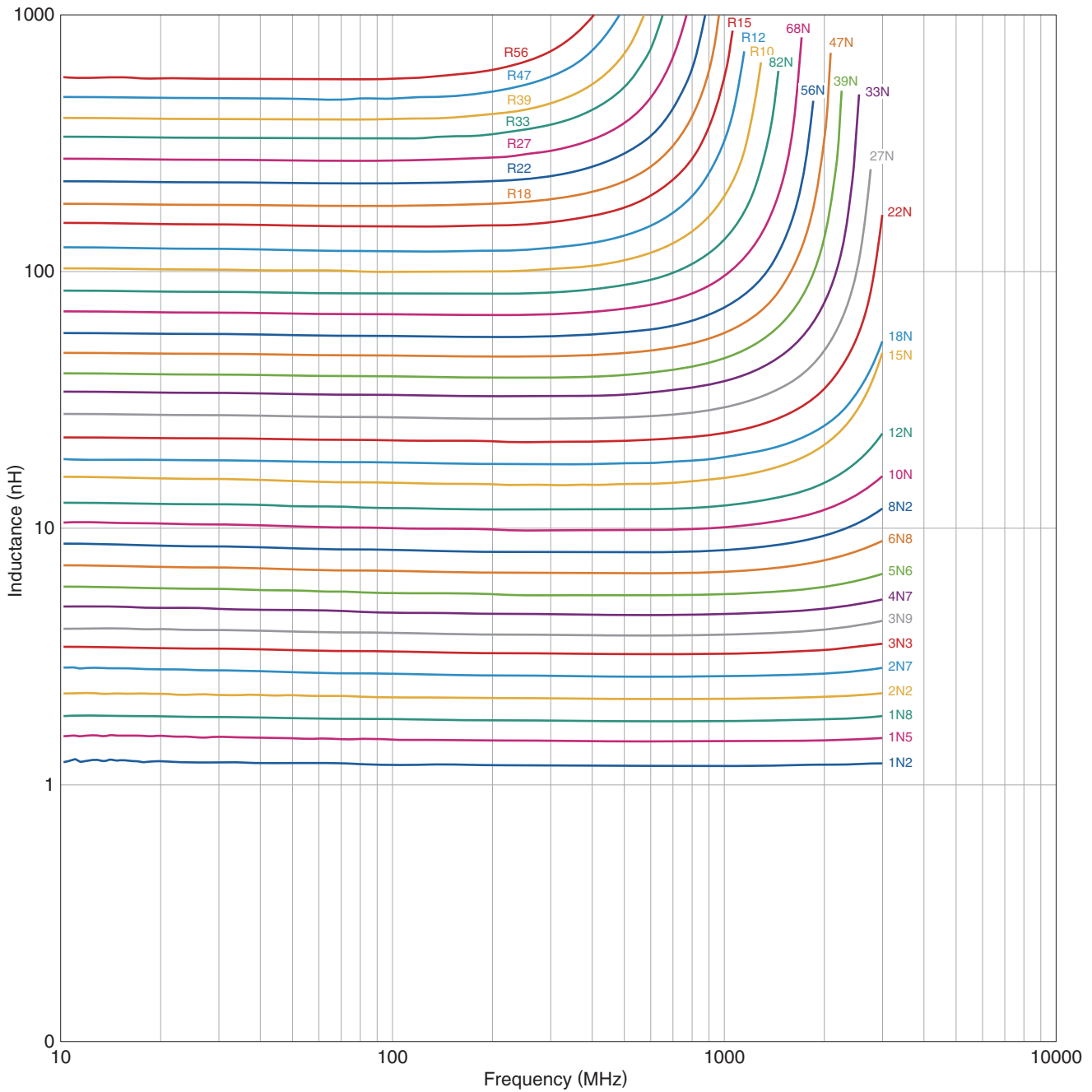
Measurement equipment

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

\* Equivalent measurement equipment may be used.

# MHQ1005P type

## L FREQUENCY CHARACTERISTICS (EXAMPLE)



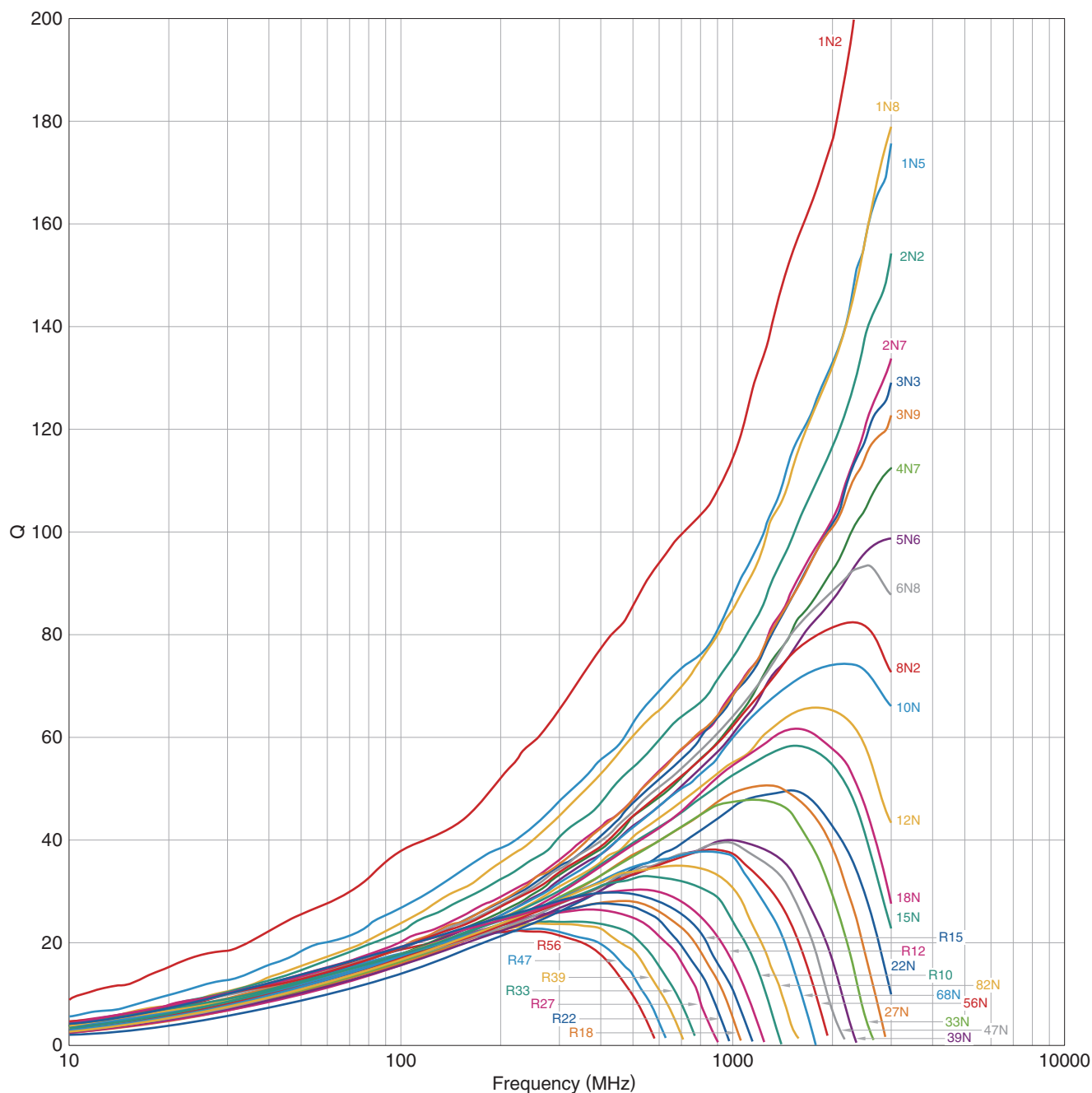
Measurement equipment

| Product No.  | Manufacturer          |
|--------------|-----------------------|
| E4991+16193A | Keysight Technologies |

\* Equivalent measurement equipment may be used.

# MHQ1005P type

## Q FREQUENCY CHARACTERISTICS (EXAMPLE)



Measurement equipment

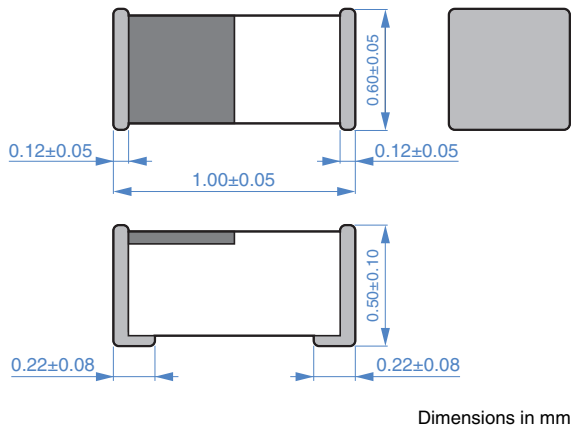
| Product No.  | Manufacturer          |
|--------------|-----------------------|
| E4991+16193A | Keysight Technologies |

\* Equivalent measurement equipment may be used.



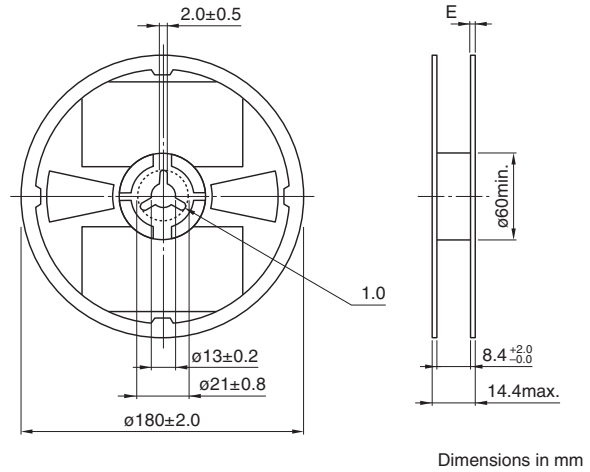
# MHQ1005P type

## SHAPE & DIMENSIONS

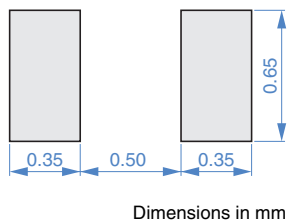


## PACKAGING STYLE

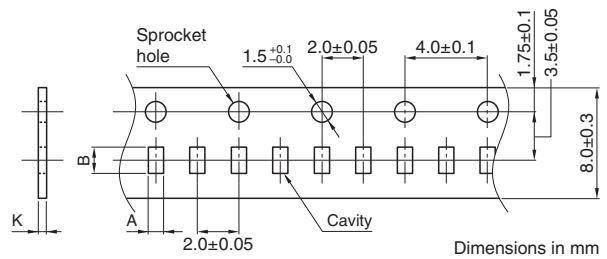
### REEL DIMENSIONS



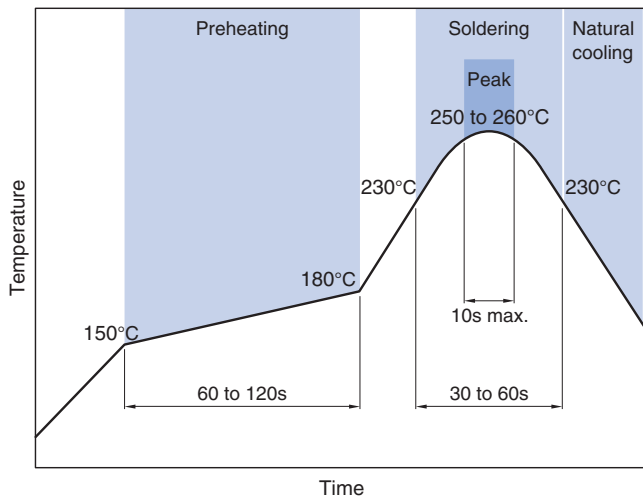
## RECOMMENDED LAND PATTERN



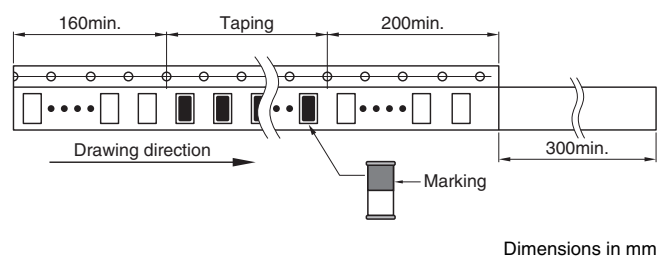
### TAPE DIMENSIONS



## RECOMMENDED REFLOW PROFILE



| Type     | A               | B               | K                  |
|----------|-----------------|-----------------|--------------------|
| MHQ1005P | $0.75 \pm 0.10$ | $1.15 \pm 0.10$ | $0.8 \text{ max.}$ |



### PACKAGE QUANTITY

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

## TEMPERATURE RANGE, INDIVIDUAL WEIGHT

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

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

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

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