

Chip Inductor AWCM Series

**Automotive
AEC-Q200**

RoHS Compliant
Halogen Free
REACH Compliant



- RF
Circuit
- Unshield
- Wire
Wound
- Ceramic
- High
Q

Part Numbering

| A | WCM | 00 | 161008 | 10N | J | 00 |
|-------|-------------|--------------|-------------------------|--------------------|-----------|---------------|
| Grade | Series Name | Control Code | Dimensions Code (mm) | Inductance (nH) | Tolerance | Internal Code |
| | | | 120707 1.19x0.64x0.66 | 2N2 2.2 | B ±0.1nH | |
| | | | 161008 1.6x1.02x0.82 | 10N 10 | C ±0.2nH | |
| | | | | R10 100 | D ±0.5nH | |
| | | | | | G ±2% | |
| | | | | | H ±3% | |
| | | | | | J ±5% | |

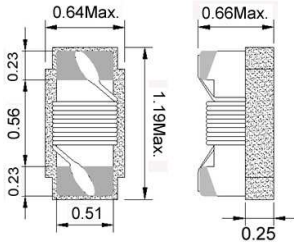
Please be sure to request approval specifications that provide further details of the products. Kindly note that the content of these specifications are subject to change or may be discontinued without prior notice. This product may not be designed/used in medical or high risk applications without Chilisin approval. Please contact our sales department before ordering.

Chip Inductor AWCN Series

**Automotive
AEC-Q200**

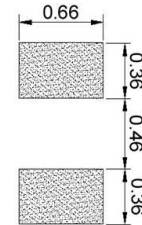
AWCM00120707 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

| Part No. | Inductance (nH) | L/Q Test | | Q Min. | SRF (MHz)Min. | RDC (Ω)Max. | I _{rms} (mA)Max. | Tolerance |
|--------------------|--------------------|----------------|--|-----------|------------------|----------------|------------------------------|----------------------|
| | | Freq. (MHz) | | | | | | |
| AWCM001207071N5□00 | 1.5 | 100/250 | | 10 | 18000 | 0.03 | 1000 | ±0.1nH,±0.2nH,±0.5nH |
| AWCM001207072N4□00 | 2.4 | 100/250 | | 20 | 15000 | 0.05 | 850 | ±0.1nH,±0.2nH,±0.5nH |
| AWCM001207072N5□00 | 2.5 | 100/250 | | 20 | 15000 | 0.05 | 850 | ±0.1nH,±0.2nH,±0.5nH |
| AWCM001207072N7□00 | 2.7 | 100/250 | | 20 | 15000 | 0.05 | 850 | ±0.1nH,±0.2nH,±0.5nH |
| AWCM001207072N9□00 | 2.9 | 100/250 | | 20 | 15000 | 0.07 | 750 | ±0.1nH,±0.2nH,±0.5nH |
| AWCM001207073N9□00 | 3.9 | 100/250 | | 25 | 10000 | 0.07 | 750 | 3,5 |
| AWCM001207074N1□00 | 4.1 | 100/250 | | 25 | 10000 | 0.07 | 750 | 3,5 |
| AWCM001207074N3□00 | 4.3 | 100/250 | | 25 | 10000 | 0.07 | 750 | 3,5 |
| AWCM001207074N7□00 | 4.7 | 100/250 | | 25 | 8000 | 0.07 | 750 | 3,5 |
| AWCM001207075N1□00 | 5.1 | 100/250 | | 25 | 8000 | 0.12 | 600 | 3,5 |
| AWCM001207075N8□00 | 5.8 | 100/250 | | 25 | 8000 | 0.12 | 700 | 3,5 |
| AWCM001207076N2□00 | 6.2 | 100/250 | | 25 | 8000 | 0.09 | 700 | 3,5 |
| AWCM001207076N8□00 | 6.8 | 100/250 | | 25 | 6000 | 0.09 | 700 | 3,5 |
| AWCM001207077N3□00 | 7.3 | 100/250 | | 25 | 6000 | 0.13 | 570 | 3,5 |
| AWCM001207077N5□00 | 7.5 | 100/250 | | 25 | 6000 | 0.13 | 570 | 3,5 |
| AWCM001207078N2□00 | 8.2 | 100/250 | | 25 | 5500 | 0.14 | 540 | 3,5 |
| AWCM001207078N7□00 | 8.7 | 100/250 | | 25 | 5500 | 0.14 | 540 | 3,5 |
| AWCM001207079N1□00 | 9.1 | 100/250 | | 25 | 5500 | 0.14 | 540 | 3,5 |
| AWCM001207079N5□00 | 10 | 100/250 | | 25 | 5500 | 0.14 | 540 | 3,5 |
| AWCM0012070710N□00 | 10 | 100/250 | | 25 | 5500 | 0.17 | 500 | 2,3,5 |
| AWCM0012070711N□00 | 11 | 100/250 | | 30 | 5500 | 0.14 | 500 | 2,3,5 |
| AWCM0012070712N□00 | 12 | 100/250 | | 30 | 5500 | 0.14 | 500 | 2,3,5 |
| AWCM0012070713N□00 | 13 | 100/250 | | 25 | 5000 | 0.21 | 430 | 2,3,5 |
| AWCM0012070715N□00 | 15 | 100/250 | | 30 | 5000 | 0.16 | 460 | 2,3,5 |
| AWCM0012070716N□00 | 16 | 100/250 | | 25 | 4500 | 0.24 | 370 | 2,3,5 |
| AWCM0012070718N□00 | 18 | 100/250 | | 25 | 4500 | 0.27 | 370 | 2,3,5 |
| AWCM0012070719N□00 | 19 | 100/250 | | 25 | 4500 | 0.27 | 370 | 2,3,5 |
| AWCM0012070720N□00 | 20 | 100/250 | | 25 | 4000 | 0.27 | 370 | 2,3,5 |
| AWCM0012070722N□00 | 22 | 100/250 | | 25 | 4000 | 0.3 | 310 | 2,3,5 |
| AWCM0012070723N□00 | 23 | 100/250 | | 25 | 3800 | 0.3 | 310 | 2,3,5 |
| AWCM0012070724N□00 | 24 | 100/250 | | 25 | 3500 | 0.52 | 280 | 2,3,5 |
| AWCM0012070727N□00 | 27 | 100/250 | | 25 | 3500 | 0.52 | 280 | 2,3,5 |

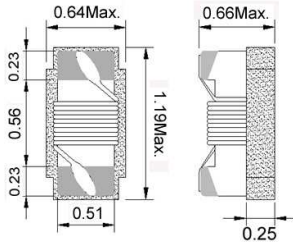
Note: □-tolerance B=±0.1nH / C=±0.2nH / D=±0.5nH / H=±3% / J=±5% / G=±2%

1. Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
2. I_{rms} for a 15°C temperature rise from 25°C ambient.
3. L/Q Test OSC @200mV.
4. Inductance would be correct Chilisin standard piece.
5. Offset value : -0.556nH

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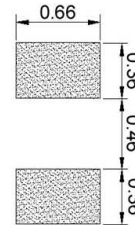
AWCM00120707 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

| Part No. | Inductance (nH) | L/Q Test Freq. (MHz) | Q Min. | SRF (MHz)Min. | RDC (Ω)Max. | Irms (mA)Max. | Tolerance |
|--------------------|-----------------|----------------------|--------|---------------|-------------|---------------|-----------|
| AWCM0012070730N□00 | 30 | 100/250 | 25 | 3300 | 0.58 | 270 | 2,3,5 |
| AWCM0012070733N□00 | 33 | 100/250 | 25 | 3200 | 0.63 | 260 | 2,3,5 |
| AWCM0012070736N□00 | 36 | 100/250 | 25 | 3100 | 0.63 | 260 | 2,3,5 |
| AWCM0012070739N□00 | 39 | 100/250 | 25 | 3000 | 0.7 | 250 | 2,3,5 |
| AWCM0012070740N□00 | 40 | 100/250 | 25 | 3000 | 0.7 | 250 | 2,3,5 |
| AWCM0012070747N□00 | 47 | 100/200 | 25 | 2900 | 1.08 | 210 | 2,3,5 |
| AWCM0012070751N□00 | 51 | 100/200 | 25 | 2850 | 1.08 | 210 | 2,3,5 |
| AWCM0012070756N□00 | 56 | 100/200 | 25 | 2800 | 1.17 | 200 | 2,3,5 |
| AWCM0012070762N□00 | 62 | 100/200 | 20 | 2600 | 1.82 | 145 | 2,3,5 |
| AWCM0012070768N□00 | 68 | 100/200 | 20 | 2500 | 1.96 | 140 | 2,3,5 |
| AWCM0012070772N□00 | 72 | 100/150 | 20 | 2500 | 2.1 | 135 | 2,5 |
| AWCM0012070775N□00 | 75 | 100/150 | 20 | 2400 | 2.1 | 135 | 2,5 |
| AWCM0012070782N□00 | 82 | 100/150 | 20 | 2300 | 2.24 | 130 | 2,5 |
| AWCM0012070791N□00 | 91 | 100/150 | 20 | 2100 | 2.38 | 125 | 2,5 |
| AWCM00120707R10□00 | 100 | 100/150 | 20 | 1500 | 2.52 | 120 | 2,5 |
| AWCM00120707R12□00 | 120 | 100/150 | 20 | 1000 | 2.66 | 110 | 2,5 |

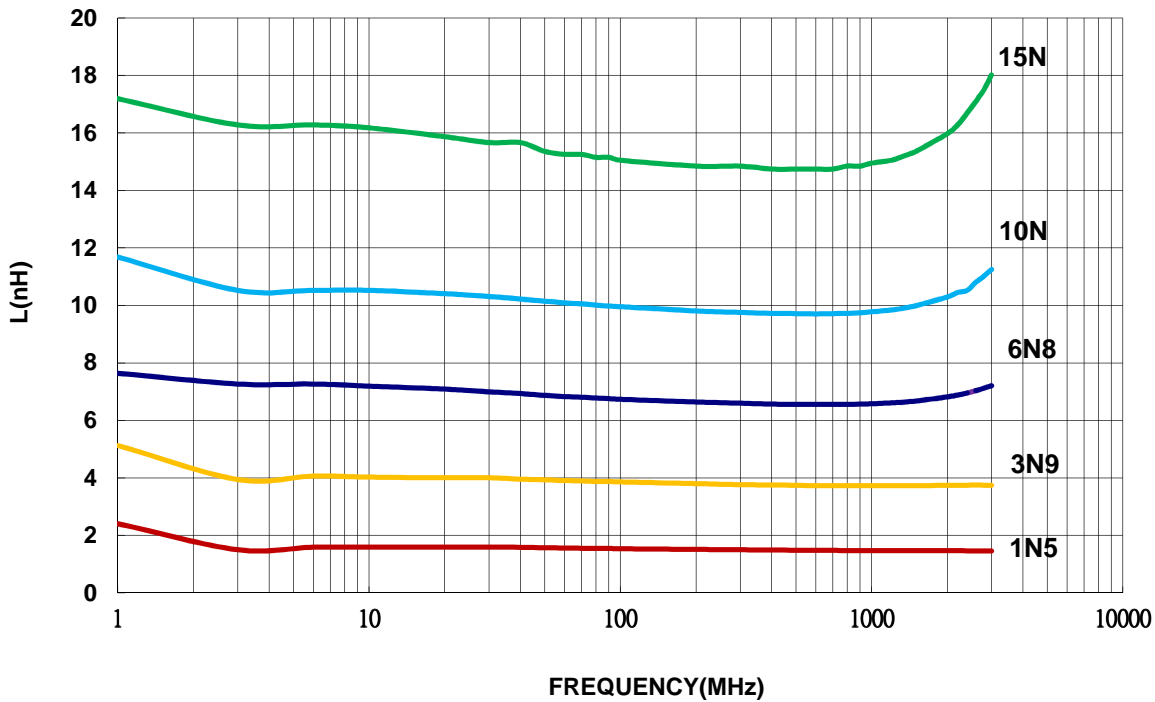
Note: □-tolerance B=±0.1nH / C=±0.2nH / D=±0.5nH / H=±3% / J=±5% / G=±2%

1. Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
2. Irms for a 15°C temperature rise from 25°C ambient.
3. L/Q Test OSC @200mV.
4. Inductance would be correct Chilisin standard piece.
5. Offset value : -0.556nH

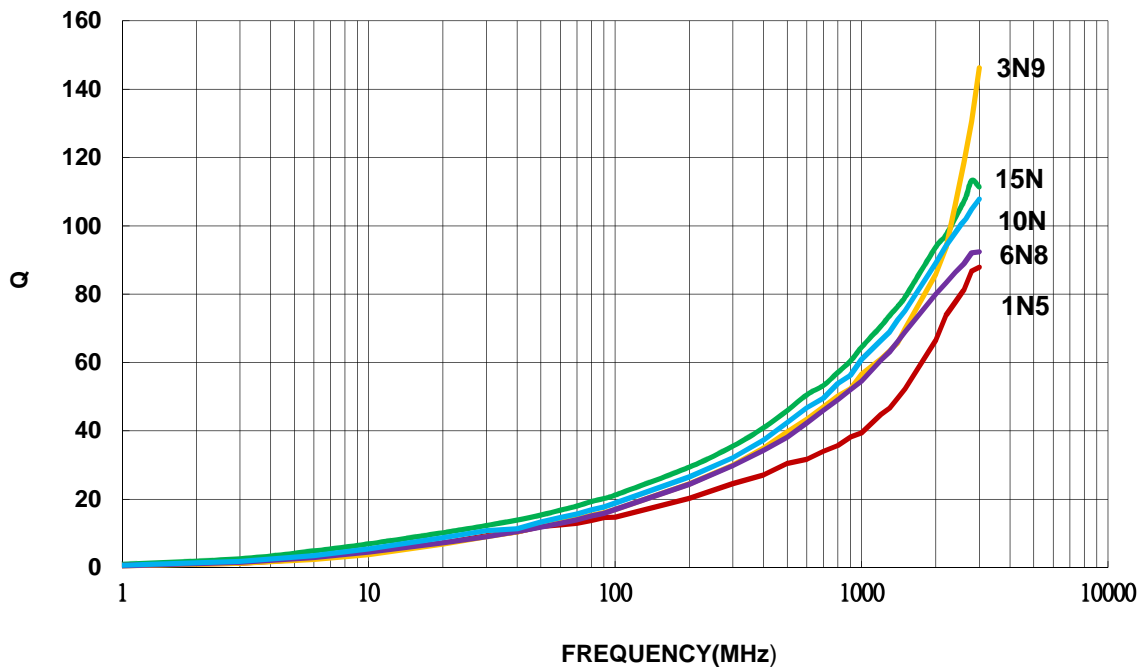
AWCM00120707 Type

Characteristics Graph

Inductance vs. Frequency Characteristics



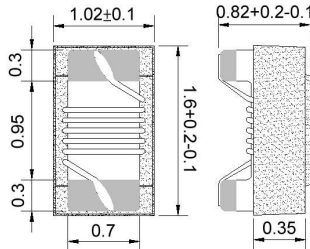
Q vs. Frequency Characteristics



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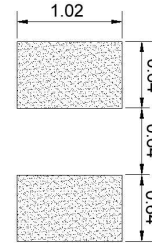
AWCM00161008 Type

Dimensions



unit:mm

Recommended Land Pattern



unit:mm

Electrical Characteristics

| Part No. | Inductance (nH) | L/Q Test Freq. (MHz) | Q Min. | SRF (MHz)Min. | RDC (Ω)Max. | I _{rms} (mA)Max. | Tolerance |
|--------------------|-----------------|----------------------|--------|---------------|-------------|---------------------------|----------------------|
| AWCM001610082N2□00 | 2.2 | 100/250 | 16 | 6000 | 0.049 | 700 | ±0.1nH,±0.2nH,±0.5nH |
| AWCM001610083N6□00 | 3.6 | 100/250 | 25 | 6000 | 0.059 | 850 | 3,5 |
| AWCM001610083N9□00 | 3.9 | 100/250 | 35 | 6000 | 0.059 | 850 | 3,5 |
| AWCM001610084N3□00 | 4.3 | 100/250 | 35 | 6000 | 0.059 | 850 | 3,5 |
| AWCM001610084N7□00 | 4.7 | 100/250 | 35 | 6000 | 0.059 | 850 | 3,5 |
| AWCM001610085N6□00 | 5.6 | 100/250 | 35 | 6000 | 0.082 | 750 | 3,5 |
| AWCM001610086N2□00 | 6.2 | 100/250 | 35 | 6000 | 0.082 | 750 | 3,5 |
| AWCM001610086N8□00 | 6.8 | 100/250 | 35 | 6000 | 0.082 | 750 | 3,5 |
| AWCM001610087N5□00 | 7.5 | 100/250 | 35 | 6000 | 0.082 | 750 | 3,5 |
| AWCM001610088N2□00 | 8.2 | 100/250 | 35 | 6000 | 0.11 | 650 | 3,5 |
| AWCM001610088N7□00 | 8.7 | 100/250 | 35 | 6000 | 0.11 | 650 | 3,5 |
| AWCM001610089N1□00 | 9.1 | 100/250 | 35 | 6000 | 0.11 | 650 | 3,5 |
| AWCM001610089N5□00 | 9.5 | 100/250 | 35 | 6000 | 0.11 | 650 | 3,5 |
| AWCM0016100810N□00 | 10 | 100/250 | 35 | 6000 | 0.11 | 650 | 2,5 |
| AWCM0016100811N□00 | 11 | 100/250 | 35 | 6000 | 0.11 | 650 | 2,5 |
| AWCM0016100812N□00 | 12 | 100/250 | 35 | 6000 | 0.13 | 600 | 2,5 |
| AWCM0016100813N□00 | 13 | 100/250 | 35 | 6000 | 0.13 | 600 | 2,5 |
| AWCM0016100815N□00 | 15 | 100/250 | 40 | 6000 | 0.13 | 600 | 2,5 |
| AWCM0016100816N□00 | 16 | 100/250 | 40 | 5500 | 0.16 | 550 | 2,5 |
| AWCM0016100818N□00 | 18 | 100/250 | 40 | 5500 | 0.16 | 550 | 2,5 |
| AWCM0016100820N□00 | 20 | 100/250 | 40 | 4900 | 0.16 | 550 | 2,5 |
| AWCM0016100822N□00 | 22 | 100/250 | 40 | 4600 | 0.17 | 500 | 2,5 |
| AWCM0016100824N□00 | 24 | 100/250 | 40 | 3800 | 0.21 | 500 | 2,5 |
| AWCM0016100827N□00 | 27 | 100/250 | 40 | 3700 | 0.21 | 440 | 2,5 |
| AWCM0016100830N□00 | 30 | 100/250 | 40 | 3300 | 0.23 | 420 | 2,5 |
| AWCM0016100833N□00 | 33 | 100/250 | 40 | 3200 | 0.23 | 420 | 2,5 |
| AWCM0016100836N□00 | 36 | 100/250 | 40 | 2900 | 0.26 | 400 | 2,5 |
| AWCM0016100839N□00 | 39 | 100/250 | 40 | 2800 | 0.26 | 400 | 2,5 |
| AWCM0016100843N□00 | 43 | 100/200 | 40 | 2700 | 0.29 | 380 | 2,5 |
| AWCM0016100847N□00 | 47 | 100/200 | 38 | 2600 | 0.29 | 380 | 2,5 |
| AWCM0016100851N□00 | 51 | 100/200 | 38 | 2500 | 0.33 | 370 | 2,5 |
| AWCM0016100856N□00 | 56 | 100/200 | 38 | 2400 | 0.35 | 360 | 2,5 |

Note: When ordering, please specify tolerance code. Tolerance: B=±0.1 / C=±0.2 / D=±0.5 / G=±2% / H=±3% / J=±5%

1. Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)

2. I_{rms} for a 15°C temperature rise from 25°C ambient.

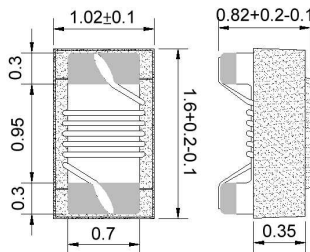
3. Measure Equipment:

L & Q: Agilent E4991A+Agilent HP16197A

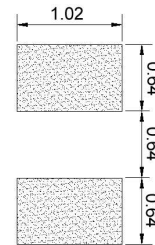
SRF: Agilent HP8753D/Agilent HP8722ES

RDC: Chroma 16502

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AWCM00161008 Type
■ Dimensions


unit:mm

■ Recommended Land Pattern


unit:mm

■ Electrical Characteristics

| Part No. | Inductance (nH) | L/Q Test Freq. (MHz) | Q Min. | SRF (MHz)Min. | RDC (Ω)Max. | I _{rms} (mA)Max. | Tolerance |
|--------------------|-----------------|----------------------|--------|---------------|-------------|---------------------------|-----------|
| AWCM0016100862N□00 | 62 | 100/200 | 38 | 2300 | 0.51 | 280 | 2,5 |
| AWCM0016100868N□00 | 68 | 100/200 | 38 | 2200 | 0.38 | 340 | 2,5 |
| AWCM0016100872N□00 | 72 | 100/150 | 34 | 2100 | 0.56 | 270 | 2,5 |
| AWCM0016100875N□00 | 75 | 100/150 | 34 | 2050 | 0.56 | 270 | 2,5 |
| AWCM0016100882N□00 | 82 | 100/150 | 34 | 2000 | 0.6 | 250 | 2,5 |
| AWCM0016100891N□00 | 91 | 100/150 | 34 | 1900 | 0.64 | 230 | 2,5 |
| AWCM00161008R10□00 | 100 | 100/150 | 34 | 1800 | 0.68 | 220 | 2,5 |
| AWCM00161008R11□00 | 110 | 100/150 | 32 | 1700 | 1.2 | 200 | 2,5 |
| AWCM00161008R12□00 | 120 | 100/150 | 32 | 1600 | 1.3 | 180 | 2,5 |
| AWCM00161008R13□00 | 130 | 100/150 | 32 | 1450 | 1.4 | 170 | 2,5 |
| AWCM00161008R15□00 | 150 | 100/150 | 32 | 1400 | 1.5 | 160 | 2,5 |
| AWCM00161008R16□00 | 160 | 100/150 | 32 | 1350 | 2.1 | 150 | 2,5 |
| AWCM00161008R18□00 | 180 | 100/100 | 25 | 1300 | 2.2 | 140 | 2,5 |
| AWCM00161008R20□00 | 200 | 100/100 | 25 | 1250 | 2.4 | 120 | 2,5 |
| AWCM00161008R22□00 | 220 | 100/100 | 25 | 1200 | 2.5 | 120 | 2,5 |
| AWCM00161008R27□00 | 270 | 100/100 | 30 | 960 | 3.4 | 110 | 2,5 |
| AWCM00161008R33□00 | 330 | 100/100 | 30 | 800 | 5.5 | 85 | 2,5 |
| AWCM00161008R39□00 | 390 | 100/100 | 30 | 800 | 6.2 | 80 | 2,5 |
| AWCM00161008R47□00 | 470 | 100/100 | 30 | 700 | 7 | 75 | 2,5 |

Note: When ordering, please specify tolerance code. Tolerance: B=±0.1 / C=±0.2 / D=±0.5 / G=±2% / H=±3% / J=±5%

1. Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)

2. I_{rms} for a 15°C temperature rise from 25°C ambient.

3. Measure Equipment:

L & Q: Agilent E4991A+Agilent HP16197A

SRF: Agilent HP8753D/Agilent HP8722ES

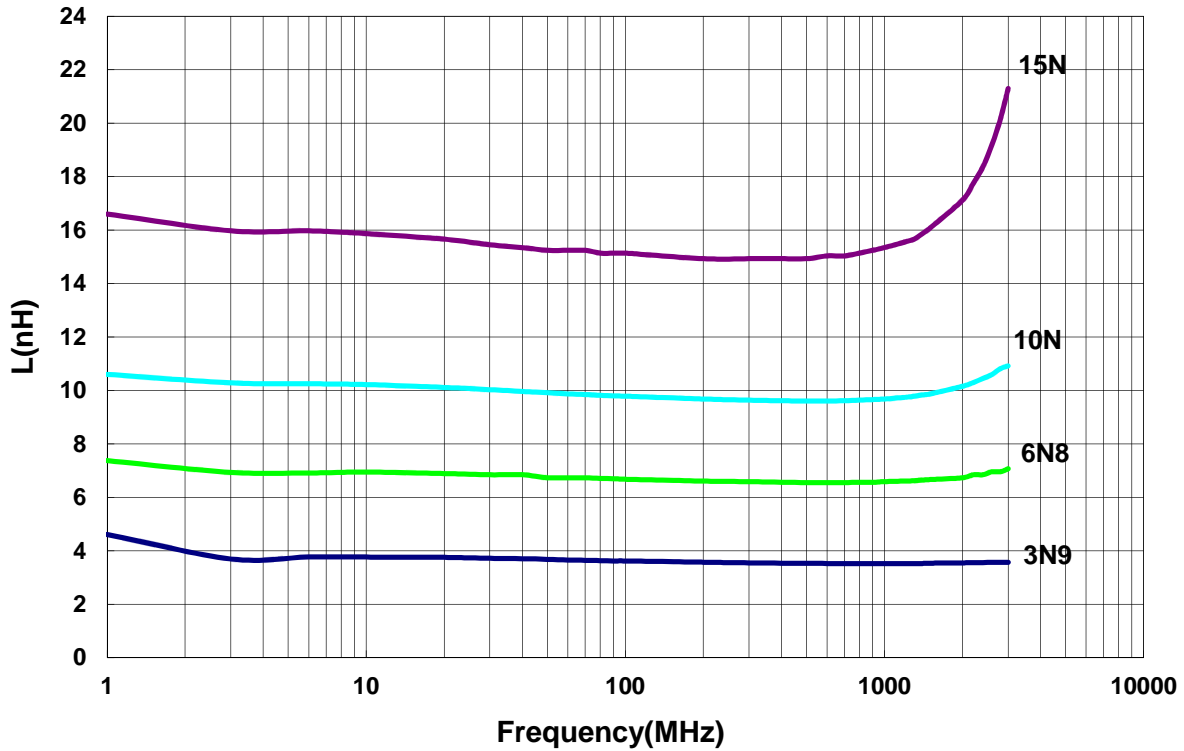
RDC:Chroma 16502

I_{rms}: HP4284A+HP42841A/HP4285A+HP42841A

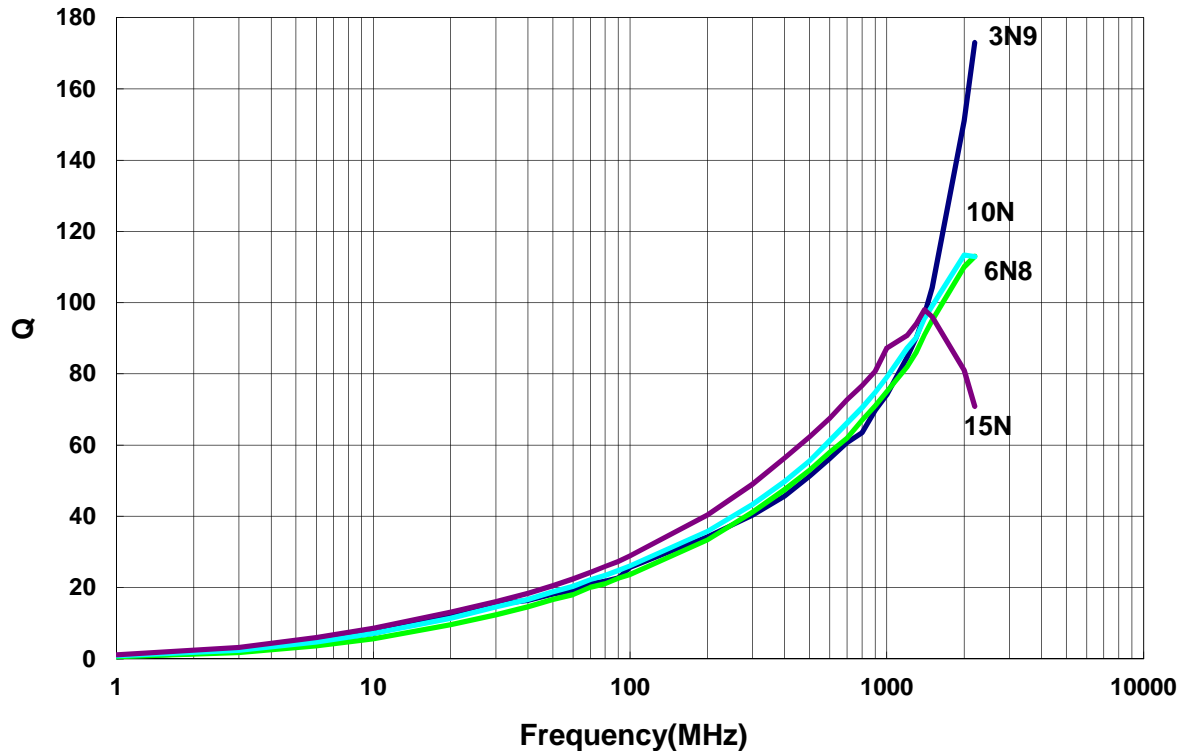
AWCM00161008 Type

Characteristics Graph

Inductance vs. Frequency Characteristics



Q vs. Frequency Characteristics

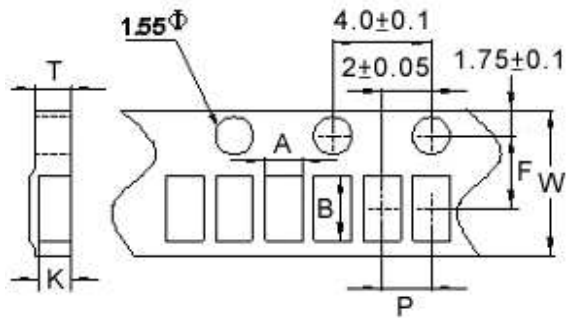


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■ Packaging

Tape Dimensions

Figure 1



Tape Material

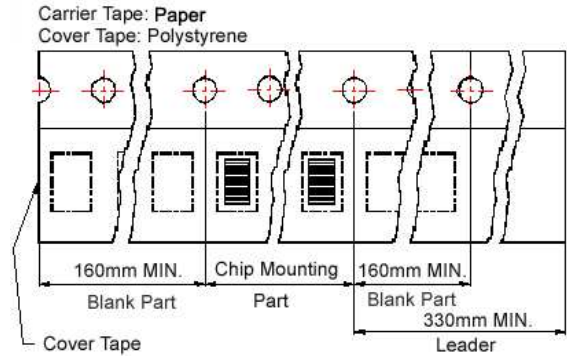
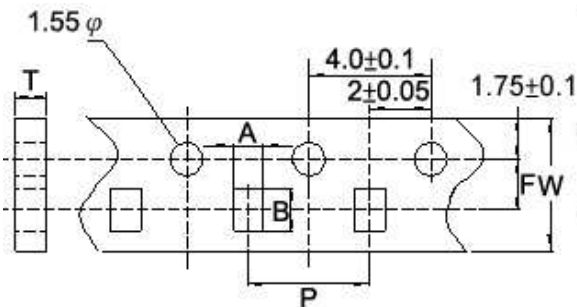
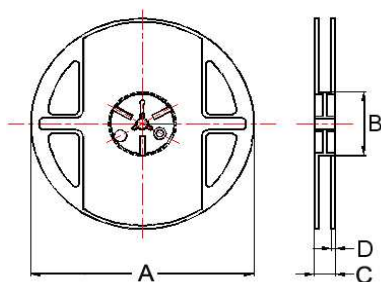


Figure 2



Reel Dimensions



Dimensions in mm

| TYPE | Fig. | Tape Dimensions | | | | | | | Reel Dimensions | | | | Quantity PCS / Reel |
|--------------|------|-----------------|------|------|---|---|-----|------|-----------------|--------|--------|---------|------------------------|
| | | A | B | T | W | P | F | K | A | B | C | D | |
| AWCM00120707 | 1 | 0.67 | 1.23 | 0.75 | 8 | 2 | 3.5 | 0.59 | 178±1 | 60±0.5 | 12±0.5 | 1.5±0.5 | 4000 |
| AWCM00161008 | 2 | 1.20 | 1.8 | 1.05 | 8 | 4 | 3.5 | - | 178 | 60 | 12 | 1.5 | 4000 |

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单击下面可查看定价，库存，交付和生命周期等信息

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