

Common Mode Choke APPM Series

**Automotive
AEC-Q200**

RoHS Compliant
Halogen Free
REACH Compliant



Noise
Suppression

Wire
Wound

Ferrite

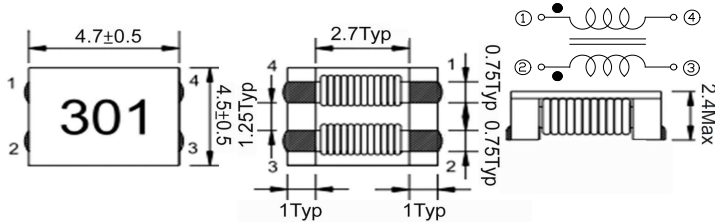
Automotive
Power line

Part Numbering

| A | PPM | 00 | 070638 | 800 | X | Y0 |
|-------|-------------|--------------|----------------------|-------------------|-----------|---------------|
| Grade | Series Name | Control Code | Dimensions Code (mm) | Impedance (Ω) Min | Tolerance | Internal Code |
| | | | 050524 4.7x4.5x2.4 | 800 80Ω | | YE |
| | | | 070638 7x6x3.8 | 101 100Ω | | Y0 |
| | | | 090748 9x7x4.8 | 701 500Ω | | |
| | | | 121165 12x10.8x6.5 | | | |
| | | | 151365 15x13x6.5 | | | |
| | | | 485023 4.8x5.0x2.3 | | | |

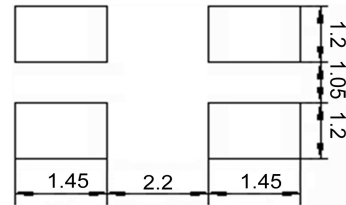
APPM00050524 - YE Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

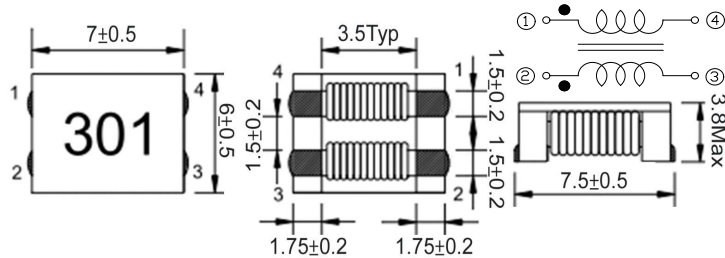
■ Electrical Characteristics

| Part No. | Impedance(Ω) | | Test Freq. | RDC (mΩ)Max. | Rated Current (A) Max | Insulation Resistance (MΩ) Min | Rated Voltage (V) Max | Marking |
|--------------------|--------------|------|---------------|-----------------|-----------------------------|--------------------------------------|-----------------------------|---------|
| | Min. | Typ. | | | | | | |
| APPM00050524301XYE | 100 | 300 | 100 MHz,0.5 V | 45 | 3 | 10 | 50 | 301 |
| APPM00050524401XYE | 200 | 400 | 100 MHz,0.5 V | 50 | 2.5 | 10 | 50 | 401 |
| APPM00050524701XYE | 500 | 700 | 100 MHz,0.5 V | 59 | 2.2 | 10 | 50 | 701 |
| APPM00050524102XYE | 800 | 1000 | 100 MHz,0.5 V | 68 | 2.1 | 10 | 50 | 102 |
| APPM00050524122XYE | 1000 | 1200 | 100 MHz,0.5 V | 74 | 2 | 10 | 50 | 122 |
| APPM00050524142XYE | 1200 | 1400 | 100 MHz,0.5 V | 81 | 1.9 | 10 | 50 | 142 |

- Operating temperature range $-40^{\circ}\text{C} \sim 125^{\circ}\text{C}$
- Rated Current: Based on temperature rise ($\Delta T: 40^{\circ}\text{C}$ Typ.)
- Measure Equipment:
 Z : HP 4291B IMPEDANCE ANALYZER (or equivalent)
 RDC : CHROMA MODEL 16502 MILLIOHMETER (or equivalent)
 Rated Current : WK3255BQ+ WK3265B (or equivalent)
 I.R : CHROMA MODEL 19073 AC/DC/IR HIPOT TESTER (or equivalent)

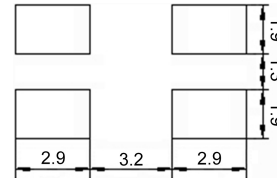
APPM00070638 - Y0 Type

Dimensions



unit:mm

Recommended Land Pattern



unit:mm

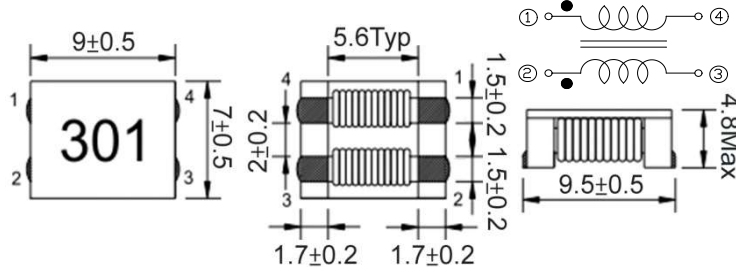
Electrical Characteristics

| Part No. | Impedance(Ω) | | Test Freq. | RDC (mΩ)Max. | Rated Current (A) Max | Insulation Resistance (MΩ) Min | Rated Voltage (V) Max | Marking |
|--------------------|--------------|------|---------------|-----------------|-----------------------------|--------------------------------------|-----------------------------|---------|
| | Min. | Typ. | | | | | | |
| APPM00070638400XY0 | 40 | 70 | 100 MHz,0.5 V | 5 | 15 | 10 | 125 | 400 |
| APPM00070638101XY0 | 100 | 140 | 100 MHz,0.5 V | 10 | 9 | 10 | 125 | 101 |
| APPM00070638301XY0 | 225 | 300 | 100 MHz,0.5 V | 10 | 5 | 10 | 125 | 301 |
| APPM00070638501XY0 | 275 | 350 | 100 MHz,0.5 V | 10 | 5 | 10 | 125 | 501 |
| APPM00070638701XY0 | 500 | 700 | 100 MHz,0.5 V | 15 | 4 | 10 | 125 | 701 |
| APPM00070638102XY0 | 800 | 1020 | 100 MHz,0.5 V | 17 | 3 | 10 | 125 | 102 |
| APPM00070638132XY0 | 910 | 1300 | 100 MHz,0.5 V | 21 | 2.5 | 10 | 125 | 132 |
| APPM00070638272XY0 | 2000 | 2700 | 100 MHz,0.5 V | 63 | 1 | 10 | 125 | 272 |
| APPM00070638302XY0 | 2500 | 3000 | 100 MHz,0.5 V | 75 | 0.9 | 10 | 125 | 302 |

1. Operating temperature range $-40^{\circ}\text{C} \sim 125^{\circ}\text{C}$
2. Rated Current: Based on temperature rise ($\Delta T: 40^{\circ}\text{C}$ Typ.)
3. Measure Equipment:
 Z : HP 4291B IMPEDANCE ANALYZER (or equivalent)
 RDC : CHROMA MODEL 16502 MILLIOHMMETER (or equivalent)
 Rated Current : WK3255BQ+ WK3265B (or equivalent)
 I.R : CHROMA MODEL 19073 AC/DC/IR HIPOT TESTER (or equivalent)

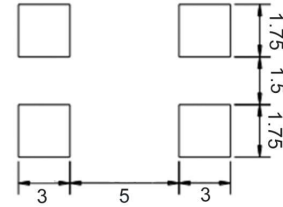
APPM00090748 - Y0 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

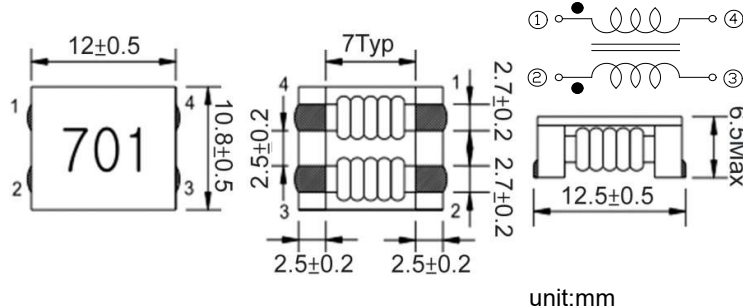
■ Electrical Characteristics

| Part No. | Impedance(Ω) | | Test Freq. | RDC (mΩ)Max. | Rated Current (A) Max | Insulation Resistance (MΩ) Min | Rated Voltage (V) Max | Marking |
|--------------------|--------------|------|---------------|-----------------|-----------------------------|--------------------------------------|-----------------------------|---------|
| | Min. | Typ. | | | | | | |
| APPM00090748301XY0 | 225 | 300 | 100 MHz,0.5 V | 6 | 6 | 10 | 80 | 301 |
| APPM00090748501XY0 | 450 | 600 | 100 MHz,0.5 V | 8 | 5.5 | 10 | 80 | 501 |
| APPM00090748701XY0 | 500 | 700 | 100 MHz,0.5 V | 10 | 5 | 10 | 80 | 701 |
| APPM00090748102XY0 | 750 | 1000 | 100 MHz,0.5 V | 13 | 4 | 10 | 80 | 102 |
| APPM00090748152XY0 | 1100 | 1500 | 100 MHz,0.5 V | 18 | 3.5 | 10 | 80 | 152 |
| APPM00090748222XY0 | 1700 | 2200 | 100 MHz,0.5 V | 60 | 2.5 | 10 | 80 | 222 |
| APPM00090748272XY0 | 2000 | 2700 | 100 MHz,0.5 V | 86 | 2 | 10 | 80 | 272 |

1. Operating temperature range $-40^{\circ}\text{C} \sim 125^{\circ}\text{C}$
2. Rated Current: Based on temperature rise ($\Delta T: 40^{\circ}\text{C}$ Typ.)
3. Measure Equipment:
 Z : HP 4291B IMPEDANCE ANALYZER (or equivalent)
 RDC : CHROMA MODEL 16502 MILLIOHMMETER (or equivalent)
 Rated Current : WK3255BQ+ WK3265B (or equivalent)
 I.R : CHROMA MODEL 19073 AC/DC/IR HIPOT TESTER (or equivalent)

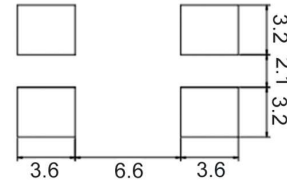
APPM00121165 - Y0 Type

Dimensions



unit:mm

Recommended Land Pattern



unit:mm

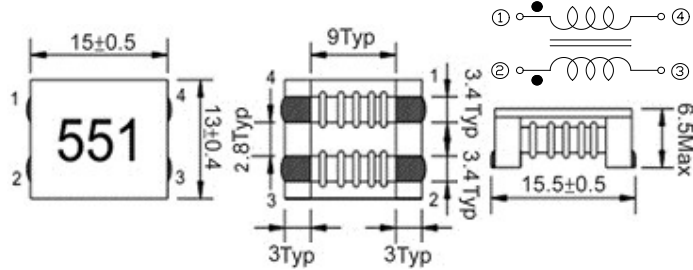
Electrical Characteristics

| Part No. | Impedance(Ω) | | Test Freq. | RDC (mΩ)Max. | Rated Current (A) Max | Insulation Resistance (MΩ) Min | Rated Voltage (V) Max | Marking |
|--------------------|--------------|------|---------------|-----------------|-----------------------------|--------------------------------------|-----------------------------|---------|
| | Min. | Typ. | | | | | | |
| APPM00121165800XY0 | 80 | 230 | 100 MHz,0.5 V | 2.2Typ | 10 | 10 | 80 | 800 |
| APPM00121165701XY0 | 500 | 700 | 100 MHz,0.5 V | 6 | 8 | 10 | 80 | 701 |
| APPM00121165801XY0 | 600 | 800 | 100 MHz,0.5 V | 8 | 8 | 10 | 80 | 801 |
| APPM00121165102XY0 | 750 | 1000 | 100 MHz,0.5 V | 14 | 6 | 10 | 80 | 102 |
| APPM00121165222XY0 | 2200 | 2500 | 10 MHz,0.5 V | 35 | 1.8 | 10 | 80 | 222 |
| APPM00121165272XY0 | 2300 | 2700 | 10 MHz,0.5 V | 50 | 1.5 | 10 | 80 | 272 |

- Operating temperature range $-40^{\circ}\text{C} \sim 125^{\circ}\text{C}$
- Rated Current: Based on temperature rise ($\Delta T: 40^{\circ}\text{C}$ Typ.)
- Measure Equipment:
 Z : HP 4291B IMPEDANCE ANALYZER (or equivalent)
 RDC : CHROMA MODEL 16502 MILLIOHMETER (or equivalent)
 Rated Current : WK3255BQ+ WK3265B (or equivalent)
 I.R : CHROMA MODEL 19073 AC/DC/IR HIPOT TESTER (or equivalent)

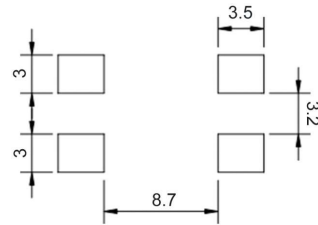
APPM00151365 - Y0 Type

Dimensions



unit:mm

Recommended Land Pattern

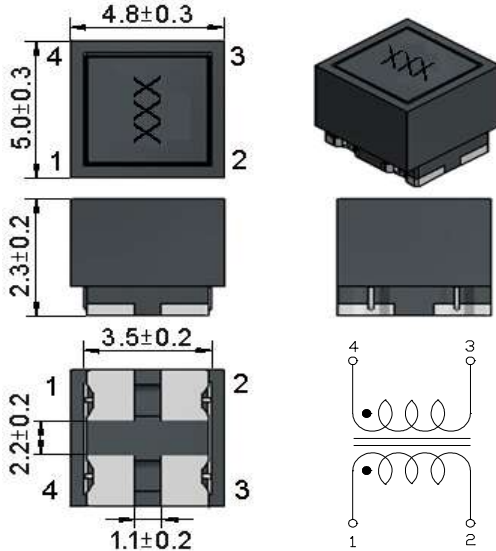


unit:mm

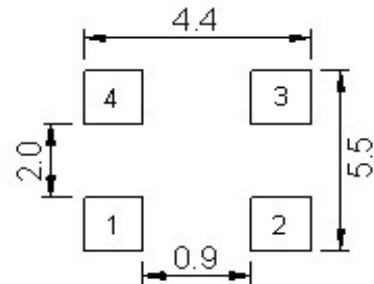
Electrical Characteristics

| Part No. | Impedance(Ω) | | Test Freq. | RDC (mΩ)Max. | Rated Current (A) Max | Insulation Resistance (MΩ) Min | Rated Voltage (V) Max | Marking |
|--------------------|--------------|------|---------------|-----------------|-----------------------------|--------------------------------------|-----------------------------|---------|
| | Min. | Typ. | | | | | | |
| APPM00151365301XY0 | 250 | 300 | 100 MHz,0.5 V | 4.7 | 13 | 10 | 125 | 301 |
| APPM00151365551XY0 | 450 | 550 | 100 MHz,0.5 V | 3.8±20% | 10 | 10 | 125 | 551 |
| APPM00151365701XY0 | 500 | 700 | 100 MHz,0.5 V | 7 | 10 | 10 | 125 | 701 |
| APPM00151365102XY0 | 600 | 1000 | 100 MHz,0.5 V | 9 | 8.5 | 10 | 125 | 102 |
| APPM00151365152XY0 | 1100 | 1500 | 50 MHz,0.5 V | 9 | 8.5 | 10 | 125 | 152 |
| APPM00151365232XY0 | 1800 | 2300 | 50 MHz,0.5 V | 11 | 7 | 10 | 125 | 322 |
| APPM00151365322XY0 | 2700 | 3200 | 40 MHz,0.5 V | 11.5 | 6 | 10 | 125 | 322 |
| APPM00151365432XY0 | 3700 | 4300 | 30 MHz,0.5 V | 21 | 5 | 10 | 125 | 432 |

1. Operating temperature range $-40^{\circ}\text{C} \sim 125^{\circ}\text{C}$
2. Rated Current: Based on temperature rise ($\Delta T: 40^{\circ}\text{C}$ Typ.)
3. Measure Equipment:
 Z : HP 4291B IMPEDANCE ANALYZER (or equivalent)
 RDC : CHROMA MODEL 16502 MILLIOHM METER (or equivalent)
 Rated Current : WK3255BQ+ WK3265B (or equivalent)
 I.R : CHROMA MODEL 19073 AC/DC/IR HIPOT TESTER (or equivalent)

APPM00485023 - Y0 Type
■ Dimensions


unit:mm

■ Recommended Land Pattern


unit:mm

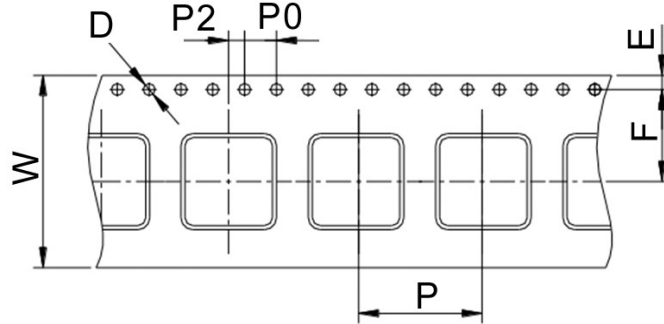
■ Electrical Characteristics

| Part No. | Impedance(Ω) | | RDC(mΩ) ±40% | I _{rms} (A)Max. | Rated Voltage (V)Max. | Withstanding voltage (V)Max. | Insulation Resistance (MΩ)Min. | Marking |
|--------------------|----------------|-----------------|-----------------|-----------------------------|-----------------------------|------------------------------------|--------------------------------------|---------|
| | Typ. @10MHz | Typ. @100MHz | | | | | | |
| APPM00485023101XY0 | - | 100 | 10 | 6 | 50 | 125 | 10 | 101 |
| APPM00485023251XY0 | 20 | 250 | 14 | 5 | 50 | 125 | 10 | 251 |
| APPM00485023501XY0 | 30 | 500 | 19 | 4 | 50 | 125 | 10 | 501 |
| APPM00485023102XY0 | 60 | 1000 | 24 | 3 | 50 | 125 | 10 | 102 |
| APPM00485023142XY0 | 100 | 1400 | 40 | 2 | 50 | 125 | 10 | 142 |
| APPM00485023152XY0 | 100 | 1500 | 40 | 2 | 50 | 125 | 10 | 152 |

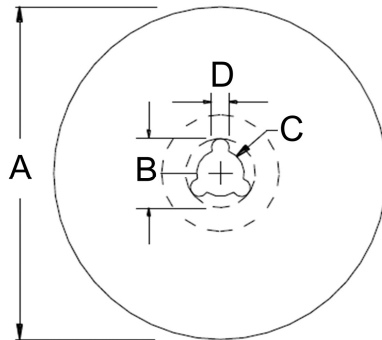
- Operating temperature range -40°C ~ 125°C
- Rated Current: Based on temperature rise (ΔT:40°C Typ.)
- Measure Equipment:
 Z : HP 4291B IMPEDANCE ANALYZER (or equivalent)
 RDC : CHROMA MODEL 16502 MILLIOHMMETER (or equivalent)
 Rated Current : WK3255BQ+ WK3265B (or equivalent)
 I.R : CHROMA MODEL 19073 AC/DC/IR HIPOT TESTER (or equivalent)

■ Packaging

Tape Dimensions



Reel Dimensions



Dimensions in mm

| TYPE | Tape Dimensions | | | | | | | Reel Dimensions | | | | Quantity PCS / REEL |
|--------------|-----------------|-----|------|------|----|----|------|-----------------|------|----|---|------------------------|
| | W | D | E | F | P | P0 | P2 | A | B | C | D | |
| APPM00050524 | 12 | 1.5 | 1.75 | 5.5 | 8 | 4 | 2 | 178 | 20 | 13 | 2 | 1000 |
| APPM00070638 | 16 | 1.5 | 1.75 | 7.5 | 12 | 4 | 2 | 330 | 20 | 13 | 2 | 1500 |
| APPM00090748 | 24 | 1.5 | 1.75 | 11.5 | 16 | 4 | 2.02 | 330 | 20 | 13 | 2 | 700 |
| APPM00121165 | 24 | 1.5 | 1.75 | 11.5 | 16 | 4 | 2 | 330 | 20 | 13 | 2 | 500 |
| APPM00151365 | 24 | 1.5 | 1.75 | 11.5 | 20 | 4 | 2 | 330 | 20 | 13 | 2 | 450 |
| APPM00485023 | 12 | 1.5 | 1.75 | 5.5 | 8 | 4 | 2 | 330 | 21.5 | 13 | 2 | 2500 |