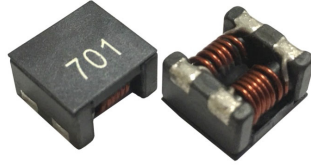


**Common Mode Choke APPM Series**

**Automotive  
AEC-Q200**

RoHS Compliant  
Halogen Free  
REACH Compliant



Noise  
Suppression

Wire  
Wound

Ferrite

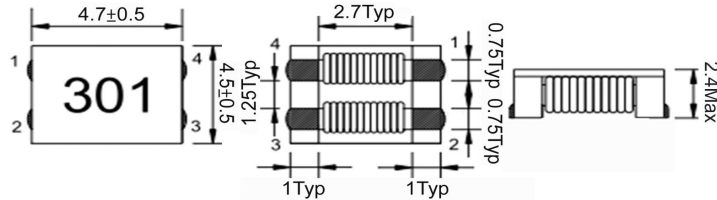
Automotive  
Power line

**Part Numbering**

| A     | PPM         | 00           | 070638                  | 800                  | X         | Y0            |
|-------|-------------|--------------|-------------------------|----------------------|-----------|---------------|
| Grade | Series Name | Control Code | Dimensions Code<br>(mm) | Impedance<br>(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      |                      |           |               |

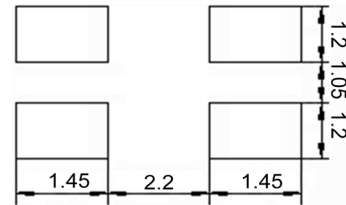
**APPM00050524 - YE Type**

**■ Dimensions**



unit:mm

**■ Recommended Land Pattern**



unit:mm

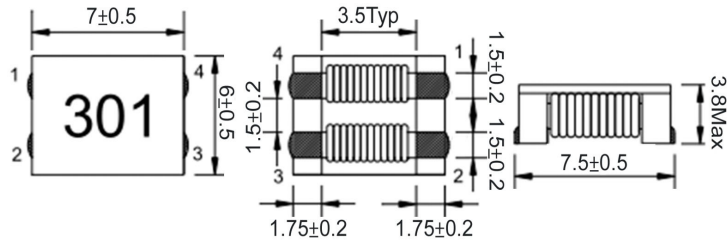
**■ Electrical Characteristics**

| Part No.           | Impedance(Ω) |      | Test Freq.    | RDC<br>(mΩ)Max. | Rated<br>Current<br>(A) Max | Insulation<br>Resistance<br>(MΩ) Min | Rated<br>Voltage<br>(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 MILLIOHM METER (or equivalent)  
 Rated Current : WK3255BQ+ WK3265B (or equivalent)  
 I.R : CHROMA MODEL 19073 AC/DC/IR HIPOT TESTER (or equivalent)

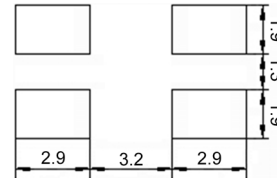
**APPM00070638 - Y0 Type**

**■ Dimensions**



unit:mm

**■ Recommended Land Pattern**



unit:mm

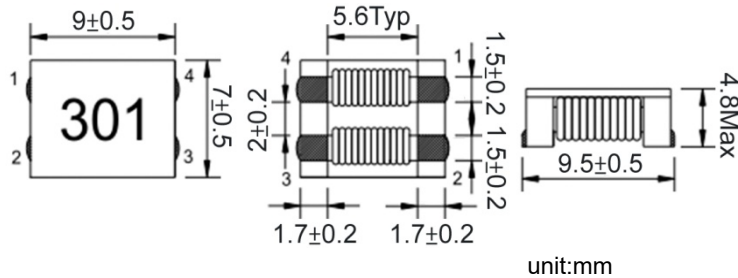
**■ Electrical Characteristics**

| Part No.           | Impedance(Ω) |      | Test Freq.    | RDC<br>(mΩ)Max. | Rated<br>Current<br>(A) Max | Insulation<br>Resistance<br>(MΩ) Min | Rated<br>Voltage<br>(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)

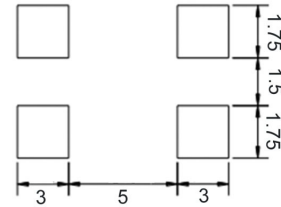
**APPM00090748 - Y0 Type**

**■ Dimensions**



unit:mm

**■ Recommended Land Pattern**



unit:mm

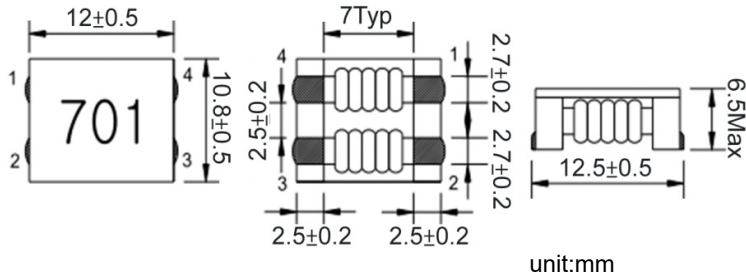
**■ Electrical Characteristics**

| Part No.           | Impedance(Ω) |      | Test Freq.    | RDC<br>(mΩ)Max. | Rated<br>Current<br>(A) Max | Insulation<br>Resistance<br>(MΩ) Min | Rated<br>Voltage<br>(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     |

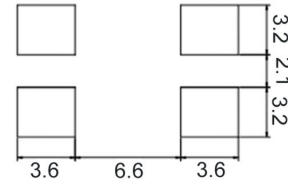
1. Operating temperature range  $-40^{\circ}\text{C} \sim 125^{\circ}\text{C}$
2. Rated Current: Based on temperature rise ( $\Delta T: 40^{\circ}\text{C}$  Typ.)
3. Measure Equipment:  
 Z : HP 4291B IMPEDANCE ANALYZER (or equivalent)  
 RDC : CHROMA MODEL 16502 MILLIOHM METER (or equivalent)  
 Rated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

**APPM00121165 - Y0 Type**

**■ Dimensions**



**■ Recommended Land Pattern**



unit:mm

unit:mm

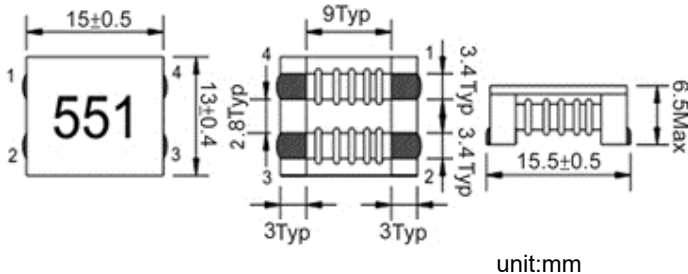
**■ Electrical Characteristics**

| Part No.           | Impedance(Ω) |      | Test Freq.    | RDC<br>(mΩ)Max. | Rated<br>Current<br>(A) Max | Insulation<br>Resistance<br>(MΩ) Min | Rated<br>Voltage<br>(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)

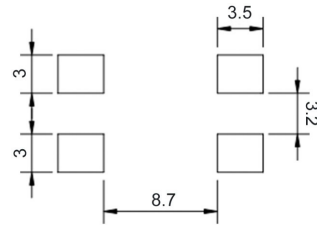
**APPM00151365 - Y0 Type**

**■ Dimensions**



unit:mm

**■ Recommended Land Pattern**



unit:mm

**■ Electrical Characteristics**

| Part No.           | Impedance(Ω) |      | Test Freq.    | RDC<br>(mΩ)Max. | Rated<br>Current<br>(A) Max | Insulation<br>Resistance<br>(MΩ) Min | Rated<br>Voltage<br>(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°C~125°C

2. Rated Current: Based on temperature rise (ΔT:40°C Typ.)

3. Measure Equipment:

Z : HP 4291B IMPEDANCE ANALYZER (or equivalent)

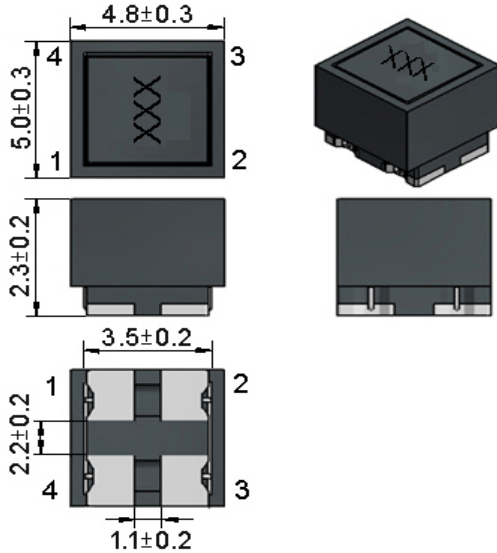
RDC : CHROMA MODEL 16502 MILLIOHM METER (or equivalent)

Rated Current : WK3255BQ+ WK3265B (or equivalent)

I.R : CHROMA MODEL 19073 AC/DC/IR HIPOT TESTER (or equivalent)

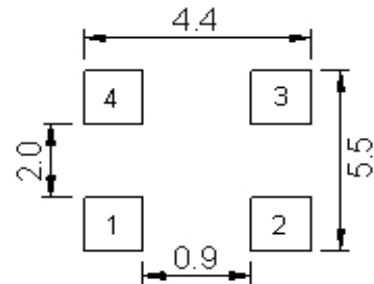
**APPM00485023 - Y0 Type**

**■ Dimensions**



unit:mm

**■ Recommended Land Pattern**



unit:mm

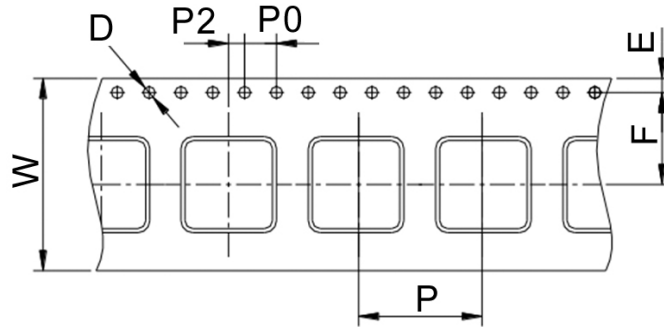
**■ Electrical Characteristics**

| Part No.           | Impedance(Ω)   |                 | RDC(mΩ)<br>±40% | I <sub>rms</sub><br>(A)Max. | Rated<br>Voltage<br>(V)Max. | Withstanding<br>voltage<br>(V)Max. | Insulation<br>Resistance<br>(MΩ)Min. | Marking |
|--------------------|----------------|-----------------|-----------------|-----------------------------|-----------------------------|------------------------------------|--------------------------------------|---------|
|                    | Typ.<br>@10MHz | Typ.<br>@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     |

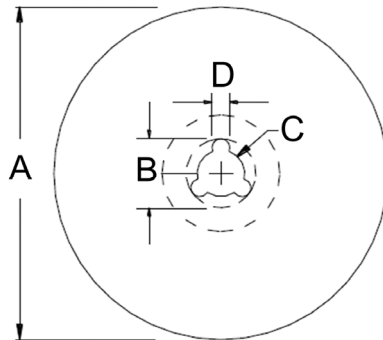
1. Operating temperature range -40°C ~ 125°C
2. Rated Current: Based on temperature rise (ΔT:40°C Typ.)
3. Measure Equipment:  
 Z : HP 4291B IMPEDANCE ANALYZER (or equivalent)  
 RDC : CHROMA MODEL 16502 MILLIOHMMETER (or equivalent)  
 Rated Current : WK3255BQ+ WK3265B (or equivalent)  
 I.R : CHROMA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

**■ Packaging**

Tape Dimensions



Reel Dimensions



Dimensions in mm

| TYPE         | Tape Dimensions |     |      |      |    |    |      | Reel Dimensions |      |    |   | Quantity<br>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                   |