

Common Mode Choke APPM Series

**Automotive
AEC-Q200**

RoHS Compliant
Halogen Free
REACH Compliant



Noise
Suppression

Wire
Wound

Ferrite

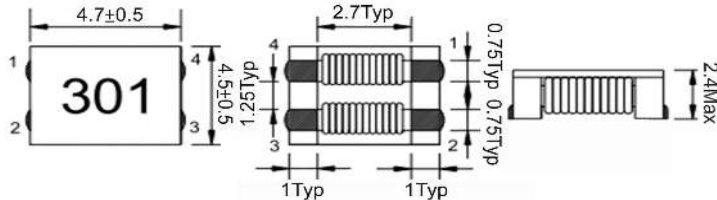
Automotive
Power line

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 80 Ω		YE
			070638 7x6x3.8	101 100 Ω		Y0
			090748 9x7x4.8	701 500 Ω		
			121165 12x10.8x6.5			
			151365 15x13x6.5			
			485023 4.8x5.0x2.3			

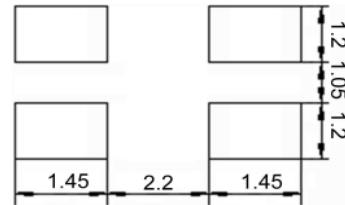
APPM00050524 - YE Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

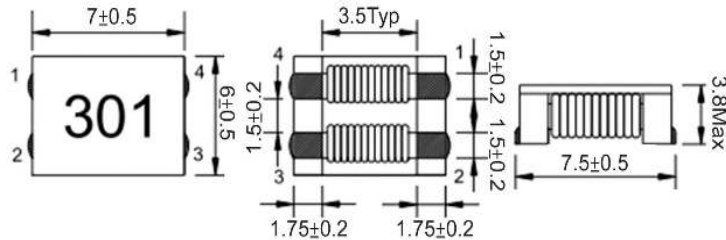
■ Electrical Characteristics

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

1. Operating temperature range - 40°C ~ 125°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 MILLIOHMETER (or equivalent)
 Rated Current : WK3255BQ+ WK3265B (or equivalent)
 I.R : CHROMA MODEL 19073 AC/DC/IR HIPOT TESTER (or equivalent)

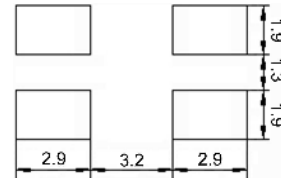
APPM00070638 - Y0 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

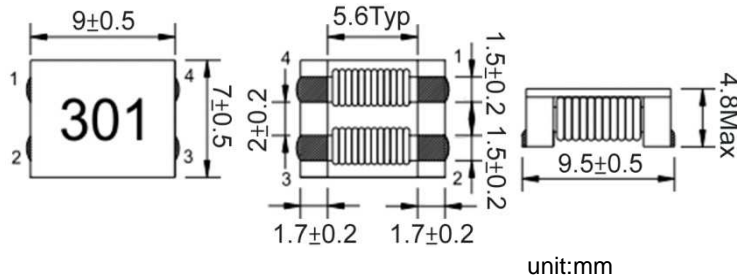
■ Electrical Characteristics

Part No.	Impedance(Ω)		Test Freq.	RDC (mΩ)Max.	Rated Current (A) Max	Insulation Resistance (MΩ) Min	Rated Voltage (V) Max	Marking
	Min.	Typ.						
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°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)

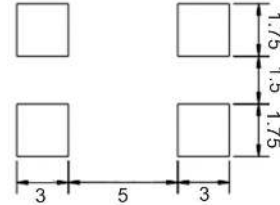
APPM00090748 - Y0 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

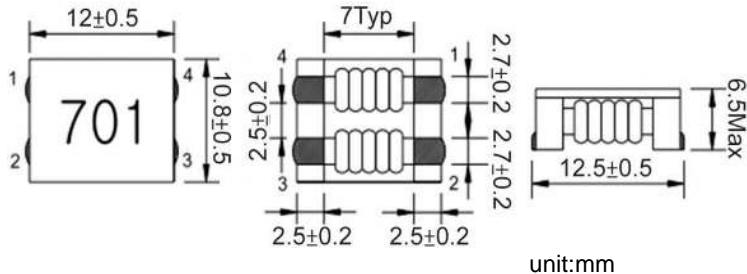
■ Electrical Characteristics

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°C ~ 125°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)

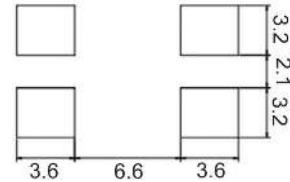
APPM00121165 - Y0 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

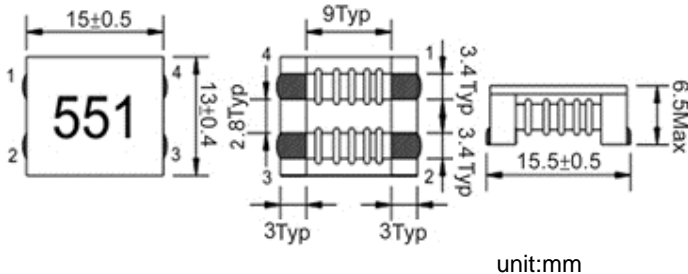
■ Electrical Characteristics

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

1. Operating temperature range - 40°C ~ 125°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)

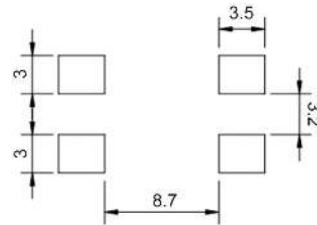
APPM00151365 - Y0 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

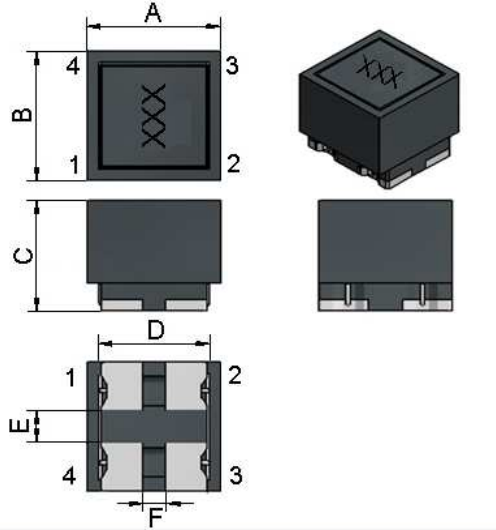
■ Electrical Characteristics

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°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)

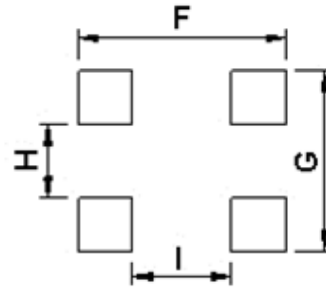
APPM00485023 - Y0 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

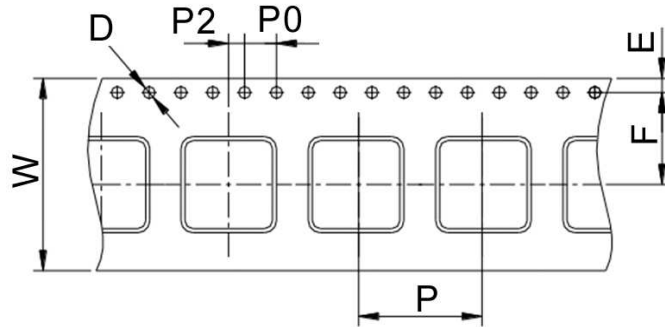
■ Electrical Characteristics

Part No.	Impedance(Ω)		RDC(m Ω) $\pm 40\%$	I _{rms} (A)Max.	Rated Voltage (V)Max.	Withstanding voltage (V)Max.	Insulation Resistance (M Ω)Min.	Marking
	Typ. @10MHz	Typ. @100MHz						
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

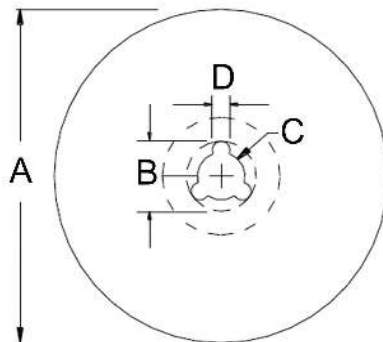
- Operating temperature range - 40°C ~ 125°C
- Rated Current: Based on temperature rise ($\Delta T: 40^\circ\text{C}$ Typ.)
- Measure Equipment:
 Z : HP 4291B IMPEDANCE ANALYZER (or equivalent)
 RDC : CHROMA MODEL 16502 MILLIOHMMETER (or equivalent)
 Rated Current : WK3255BQ+ WK3265B (or equivalent)
 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