**BCMA Series**

Common Mode Filters For Automotive Signal Line

Size 1009

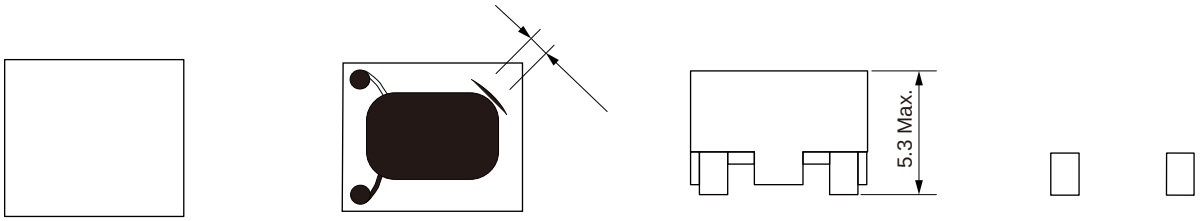
**FEATURES**

- High common mode impedance at high frequency cause excellent noise suppression performance
- Designed to be low profile and Supports large currents (up to 5 A)
- Opera ng temperature range: -40 to +125°C
- AEC-Q200 qualified
- Quan ty: 1000pcs

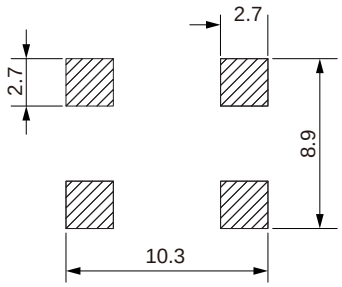
**APPLICATION**

- Measures against common mode noise in power lines Headlamps, tail lamps and interior ligh ng
- HVAC
- Doors, window li and seat control
- Audio subsystem
- Digital instrument cluster
- In-Vehicle Infotainment and naviga on

Dimensions: [mm]




Land Pattern: [mm]

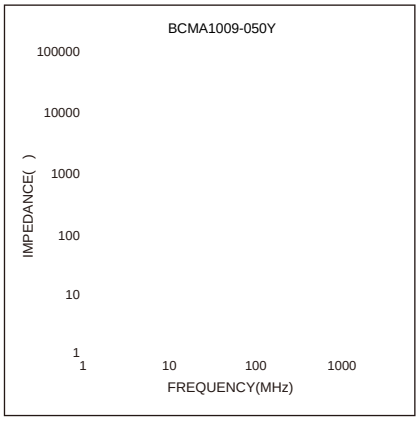


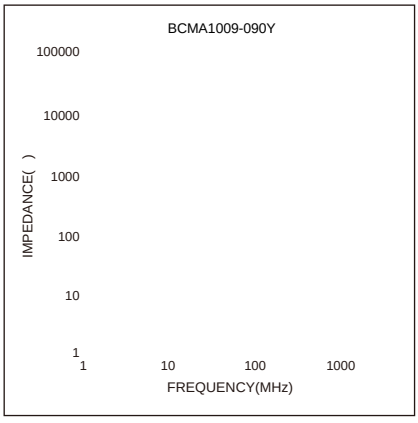
## Electrical Properties:

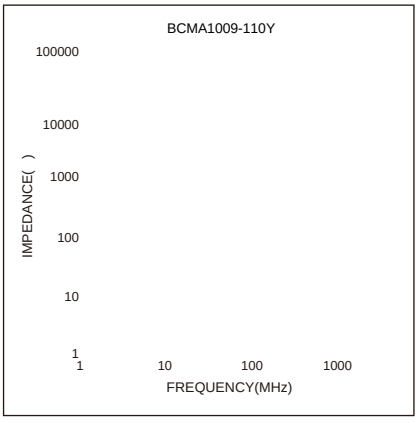
| Part No | Inductance @100KHz/0.1V | Tolerance | Impedance Max. | Temperature Rise Current Max. | DC Resistance Max. | Frequency |
|---|---|---|---|---|---|---|
| BCMA1009-050Y | 5 | ±50% | 500 | 5.00 | 10 | 108 |
| BCMA1009-090Y | 9 | ±50% | 800 | 3.50 | 11 | 105 |
| BCMA1009-110Y | 11 | ±50% | 1000 | 2.50 | 30 | 100 |
| BCMA1009-300Y | 30 | ±50% | 2200 | 1.40 | 60 | 60 |
| BCMA1009-500Y | 50 | ±50% | 3200 | 0.50 | 96 | 22 |
| BCMA1009-121Y | 120 | ±40% | 600 | 2.50 | 30 | 40 |
| BCMA1009-151Y | 150 | ±40% | 600 | 3.50 | 13 | 10 |
| BCMA1009-221Y | 220 | ±40% | 1200 | 2.20 | 32 | 18 |
| BCMA1009-251Y | 250 | ±40% | 1200 | 2.00 | 40 | 15 |
| BCMA1009-471Y | 470 | ±40% | 2100 | 1.60 | 70 | 12 |
| BCMA1009-102Y | 1000 | ±40% | 4200 | 0.95 | 180 | 6.0 |
| BCMA1009-222Y | 2200 | ±40% | 7500 | 0.75 | 300 | 4.0 |
| BCMA1009-332Y | 3300 | ±40% | 8900 | 0.65 | 360 | 2.0 |
| BCMA1009-392Y | 3900 | ±40% | 9600 | 0.52 | 540 | 2.0 |
| BCMA1009-472Y | 4700 | ±40% | 13000 | 0.35 | 720 | 1.2 |

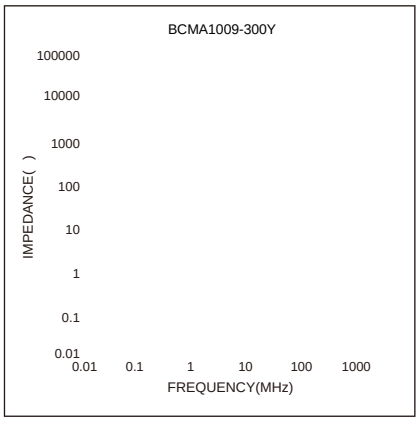
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

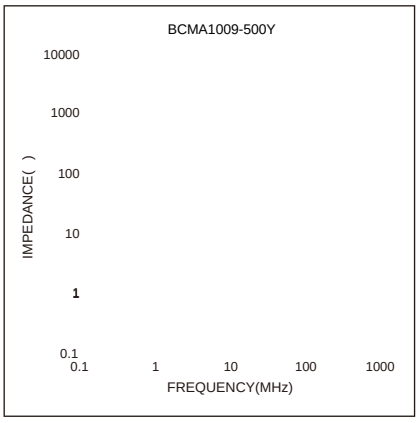
## Typical Electrical Characteristics:

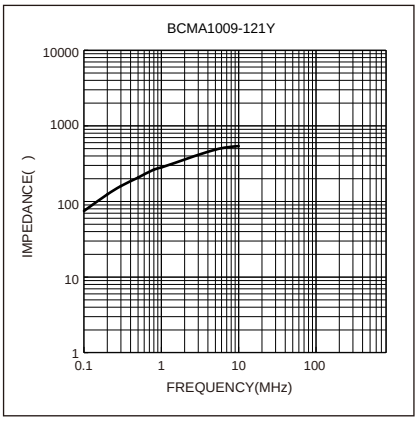


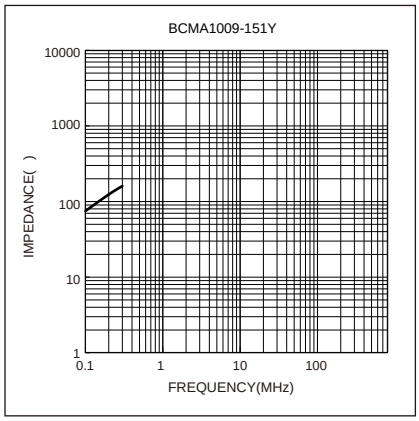



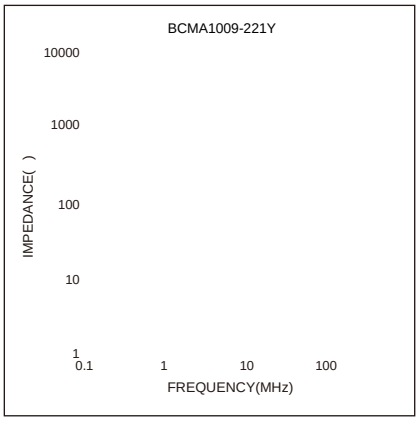



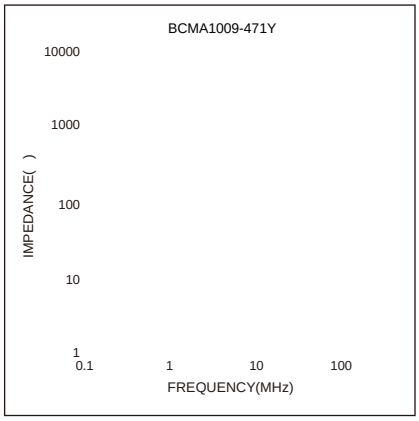



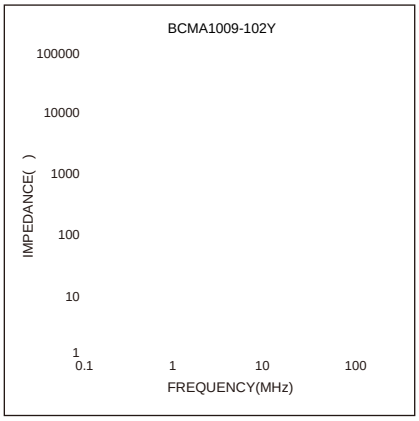



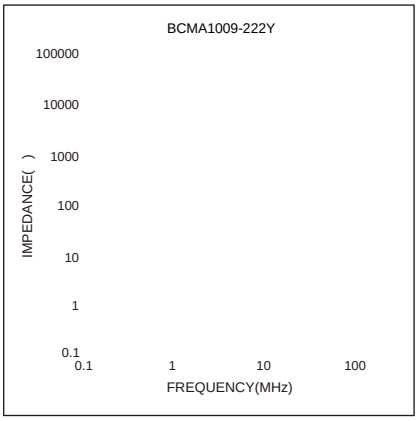



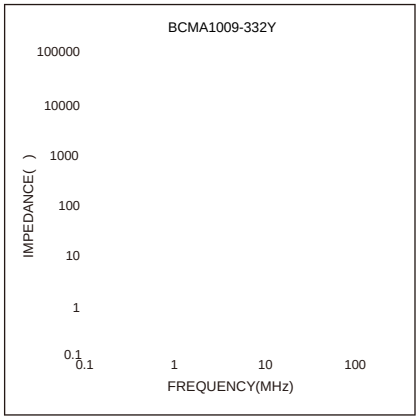

BCMA1009-151Y
IMPEDANCE( )
10000
1000
100
10
1
0.1
1
10
100
FREQUENCY(MHz)

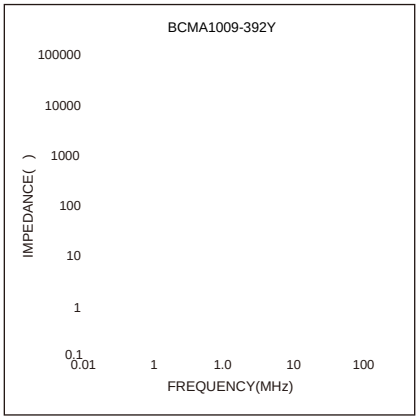

BCMA1009-221Y
IMPEDANCE( )
10000
1000
100
10
1
0.1
1
10
100
FREQUENCY(MHz)

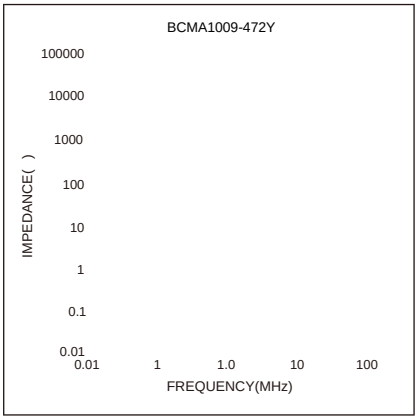

BCMA1009-471Y
IMPEDANCE( )
10000
1000
100
10
1
0.1
1
10
100
FREQUENCY(MHz)


BCMA1009-102Y
IMPEDANCE( )
100000
10000
1000
100
10
1
0.1
1
10
100
FREQUENCY(MHz)


BCMA1009-222Y
IMPEDANCE( )
100000
10000
1000
100
10
1
0.1
0.1
1
10
100
FREQUENCY(MHz)


BCMA1009-332Y
IMPEDANCE( )
100000
10000
1000
100
10
1
0.1
0.1
1
10
100
FREQUENCY(MHz)


BCMA1009-392Y
IMPEDANCE( )
100000
10000
1000
100
10
1
0.1
0.01
1
1.0
10
100
FREQUENCY(MHz)


BCMA1009-472Y
IMPEDANCE( )
100000
10000
1000
100
10
1
0.1
0.01
0.01
1
1.0
10
100
FREQUENCY(MHz)

## Soldering Reflow:

## Packaging Information:

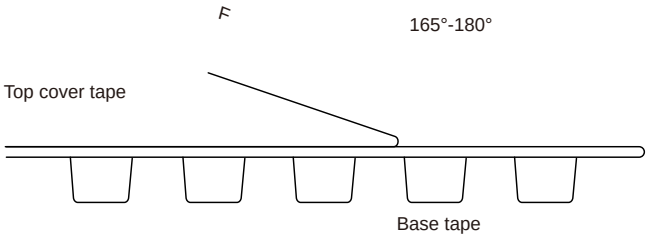
### Tape Dimension:

| Series | A0 (mm) | B0 (mm) | D (mm) | P0 (mm) | P1 (mm) | W (mm) | K0 (mm) | E (mm) | T (mm) |
|---|---|---|---|---|---|---|---|---|---|
| @AK?/..7 | 6,4®.,/ | /.,3®.,/ | /,3®.,/ | 2,.®.,/ | /0,.®.,/ | 02,.®.,1 | 3,2®.,/ | /,53®.,/ | .,2.®.,.3 |

### Product Marking:

| | |
|---|---|
| K_pigle | Npglrgle Glbsar_lac' |

Peel force of top cover tape:




Reel Dimension：[mm]




Packaging Quantity:

# Cautions and Warnings:

## Storage Conditions：

- The storage period is within 12 months after the completion of production. Be sure to follow the storage conditions (temperature: -5 to 35°C, humidity: 75% RH Max).If the storage period elapses, the soldering of the terminal electrodes may deteriorate.The warranty period is one year.
- Product should not be exposed to environment with high temperature, high humidity, dust, corrosive gas and etc.
- Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
- Please always handle products carefully to prevent any damage caused by dropping down or inappropriate removing.

## Operation Instructions:

- Self heating (temperature increase) occurs when the power is turned ON, so the tolerance should be sufficient for the set thermal design.
- 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.
- Generally, Koher might not be familiar with either customer's specific application or actual requests as customer does.As a result customer shall be responsible for checking and confirming whether Koher product with the performance described in the product specification is suitable for using in customer's particular application or not.

## Conformal coating:

- The inductance value may change due to the high cure stress of the resin used for coating or molding.
- An open circuit may occur due to mechanical stress from the resin, its amount, cured shape, or operating conditions.
- Please exercise careful attention when selecting a resin for the coating or molding process.

  Prior to using the coating resin, please verify that no reliability issues are observed.