



**THE DATASHEET OF  
BCMA9070-102Y**



# BCMA Series

## Common Mode Filters For Automotive Power Line

### Size 9070



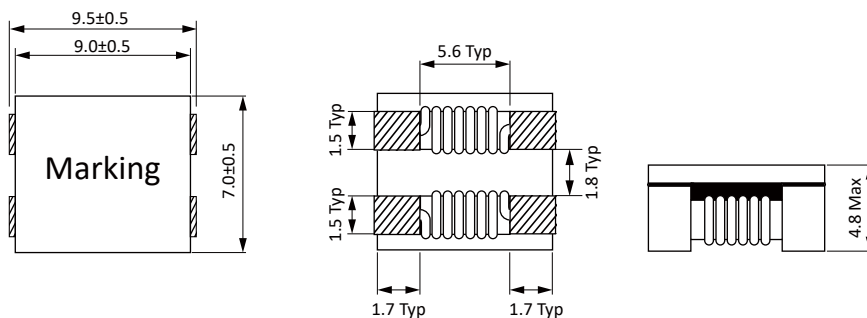
#### FEATURES

- Exclusive square type closed magnetic core designed as an exclusive core is used, so it can be small while maintaining the same features.
- Low profile design makes it optimal for surface mounting.
- Excellent impedance characteristics, making it great for suppressing common mode noise.
- Operating temperature range:  $-40$  to  $+125^{\circ}\text{C}$
- AEC-Q200 qualified
- Quantity: 800pcs

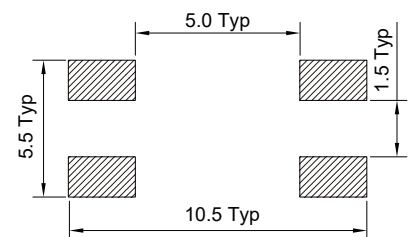
#### APPLICATIONS

- Measures against common mode noise in power lines for various DC power lines, multimedia devices, and various electronic devices

#### Dimensions: [mm]



#### Land Pattern: [mm]

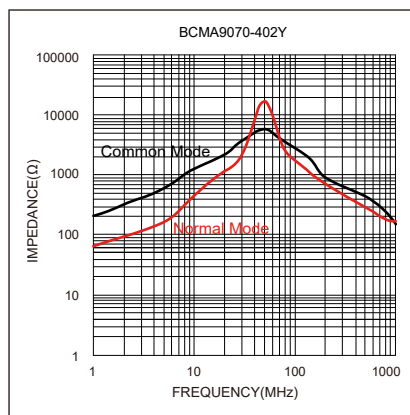
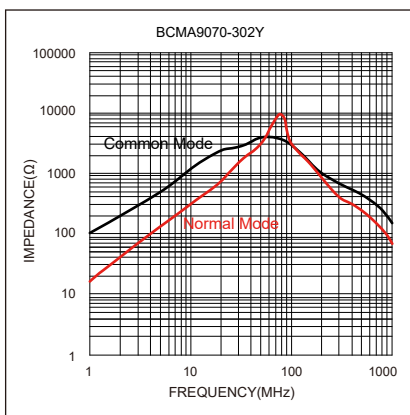
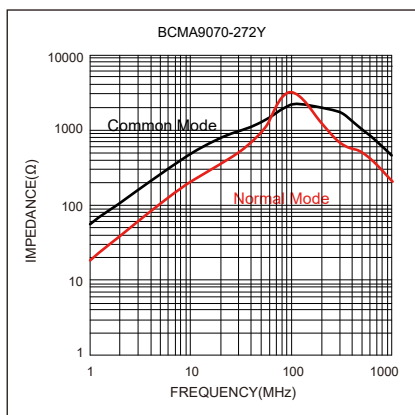
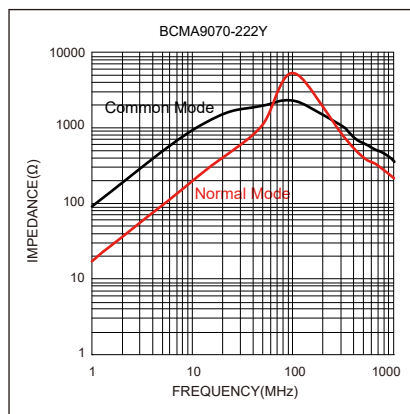
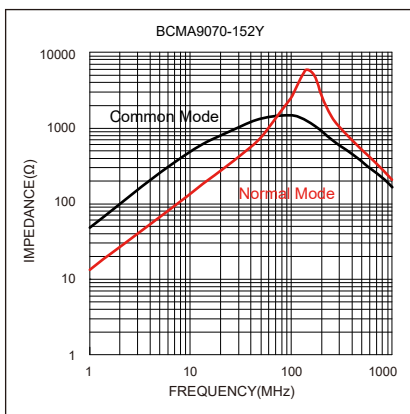
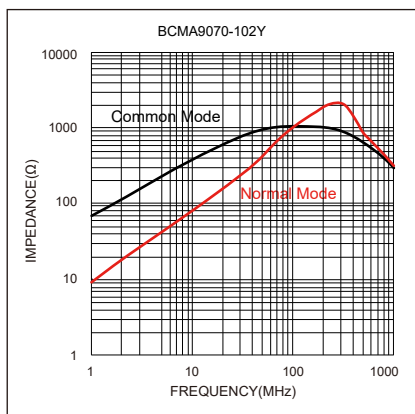
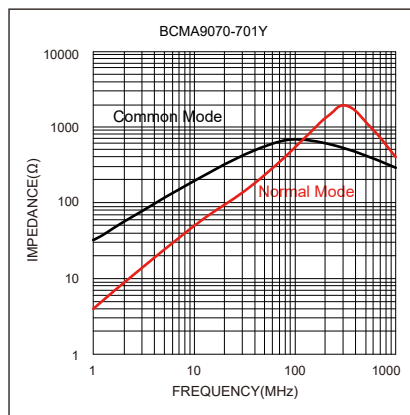
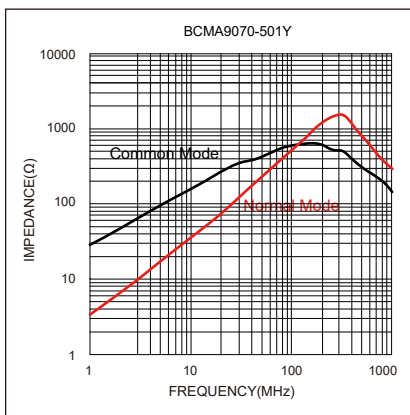
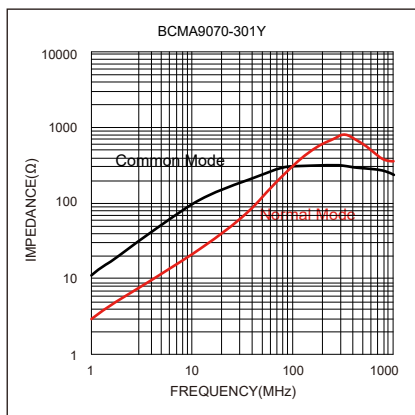


#### Electrical Properties:

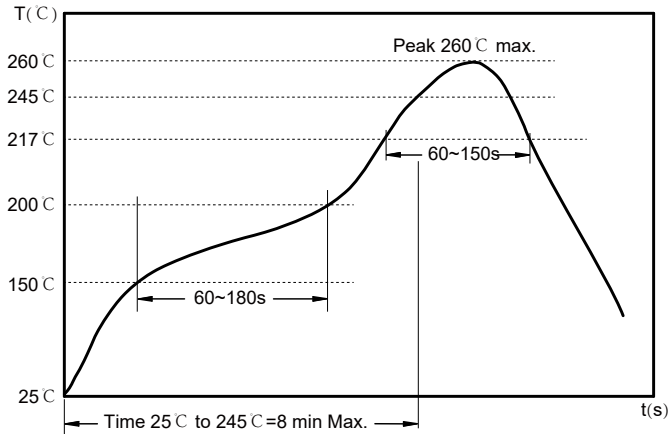
| Part No       | Impedance Min. ( $\Omega$ ) | Impedance Typ. ( $\Omega$ ) | Test Frequency @0.1V | $I_R$ Max. (A) | $R_{DC}$ Max. (m $\Omega$ ) | $V_{DC}$ Max. (Volts) | IR Min. (M $\Omega$ ) |
|---------------|-----------------------------|-----------------------------|----------------------|----------------|-----------------------------|-----------------------|-----------------------|
| BCMA9070-301Y | 225                         | 300                         | 100MHz               | 6.0            | 6                           | 80                    | 10                    |
| BCMA9070-501Y | 450                         | 500                         | 100MHz               | 5.5            | 8                           | 80                    | 10                    |
| BCMA9070-701Y | 500                         | 700                         | 100MHz               | 5.0            | 10                          | 80                    | 10                    |
| BCMA9070-102Y | 750                         | 1000                        | 100MHz               | 4.0            | 13                          | 80                    | 10                    |
| BCMA9070-152Y | 1000                        | 1500                        | 100MHz               | 4.5            | 15                          | 80                    | 10                    |
| BCMA9070-222Y | 1700                        | 2200                        | 20~50MHz             | 3.0            | 50                          | 80                    | 10                    |
| BCMA9070-272Y | 2000                        | 2700                        | 20~50MHz             | 3.5            | 32                          | 80                    | 10                    |
| BCMA9070-302Y | 2500                        | 3000                        | 20~50MHz             | 1.9            | 85                          | 80                    | 10                    |
| BCMA9070-402Y | 3300                        | 4000                        | 20~50MHz             | 1.8            | 100                         | 80                    | 10                    |

Temperature Rise Current: The actual value of DC current when the temperature rise is  $\Delta T=40^{\circ}\text{C}$

Typical Electrical Characteristics:



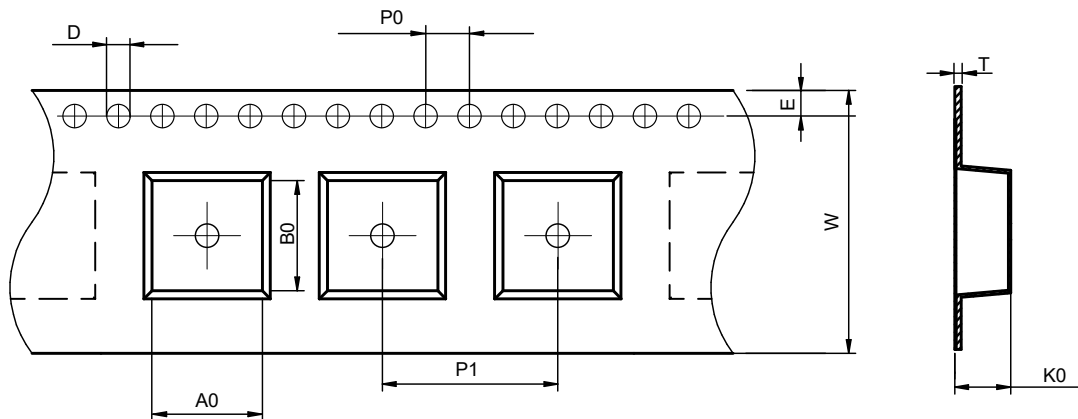
Soldering Reflow:



Preheat condition: 150 ~200 C / 60~180 sec.  
 Allowed time above 217 C: 60~150 sec.  
 Max temperature: 260 C.  
 Max time at max temperature: 10 sec.  
 Allowed Reflow time: 3x max.

Packaging Information:

Tape Dimension:

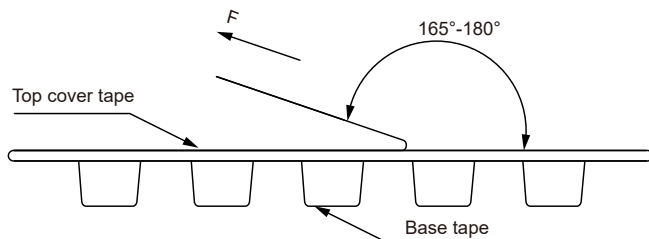


| Series   | A0 (mm) | B0 (mm)  | D (mm)  | P0 (mm) | P1 (mm)  | W (mm)   | K0 (mm)  | E (mm)   | T (mm)    |
|----------|---------|----------|---------|---------|----------|----------|----------|----------|-----------|
| BCMA9070 | 7.6±0.1 | 9.60±0.1 | 1.5±0.1 | 4.0±0.1 | 16.0±0.1 | 24.0±0.3 | 5.10±0.1 | 1.75±0.1 | 0.35±0.05 |

Product Marking:

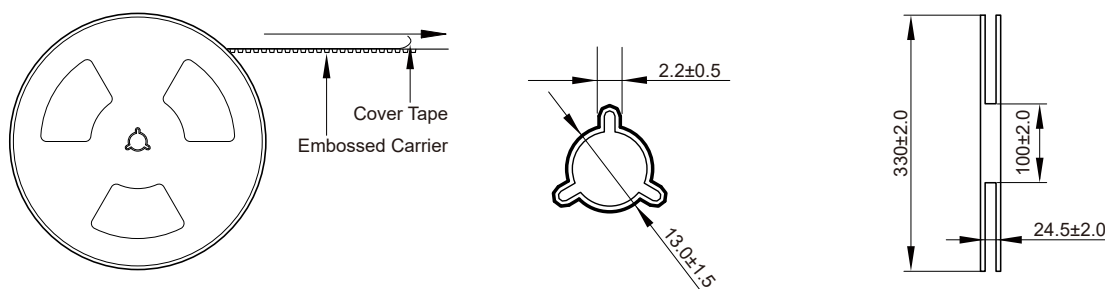
|         |                      |
|---------|----------------------|
| Marking | Printing (Impedance) |
|---------|----------------------|

Peel force of top cover tape:

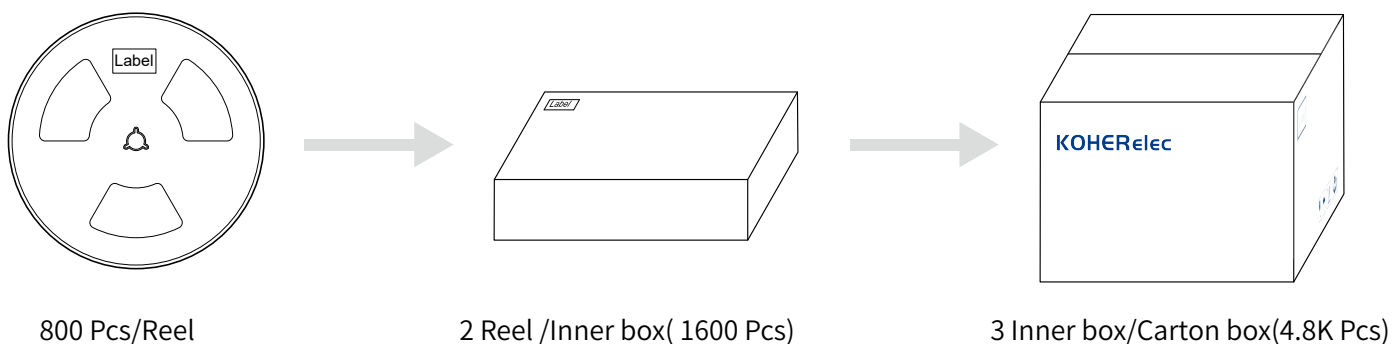


The peel force of top cover tape shall be between 0.10 to 1.17 N

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.
- When applying conformal coating for product protection, materials with a high shrinkage rate should be avoided. If such materials must be used, it is recommended to apply silicone around the inductor core in a closed loop to prevent the conformal coating from flowing into or penetrating the windings, thereby avoiding open-circuit failures caused by the coating's thermal stress.

## Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- ⊖ [View BCMA9070-102Y on WIN SOURCE](#)
- ⊖ [KOHERShanghaiElectronics Co.,Ltd Information](#)

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- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
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