

## BCMA Series

Common Mode Filters For Automotive Signal Line/Power Line  
Size 5020



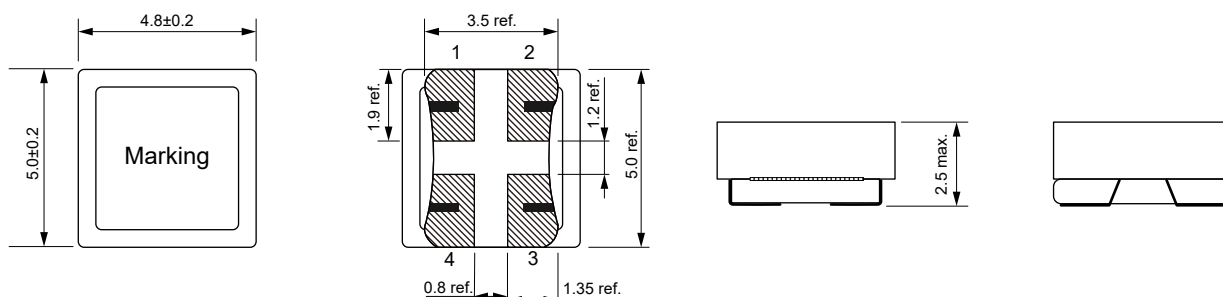
### FEATURES

- High common mode impedance at high frequency cause excellent noise suppression performance
- Designed to be low profile and Supports large currents (up to 6 A)
- Operating temperature range: -40 to +125°C(including self-temperature rise)
- AEC-Q200 qualified
- Quantity: 2500pcs

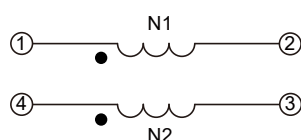
### APPLICATION

- Headlamps, tail lamps and interior lighting
- HVAC
- Doors, window lift and seat control
- Audio subsystem
- Digital instrument cluster
- In-Vehicle Infotainment and navigation

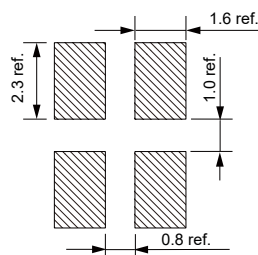
Dimensions: [mm]



Schematic:



Land Pattern: [mm]

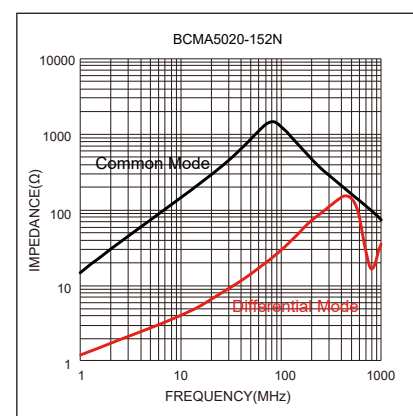
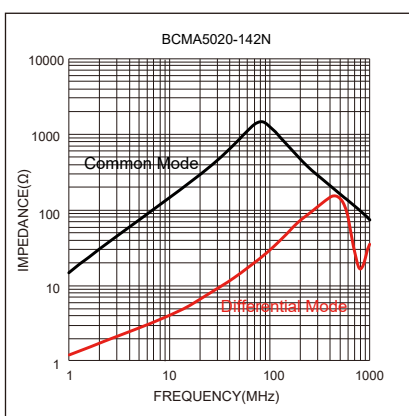
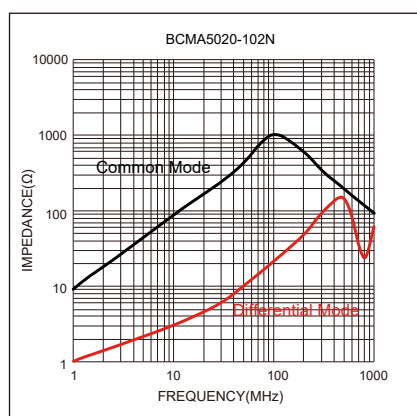
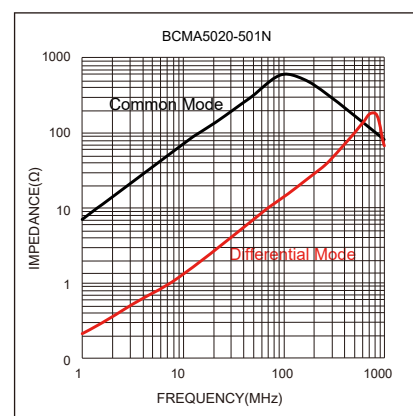
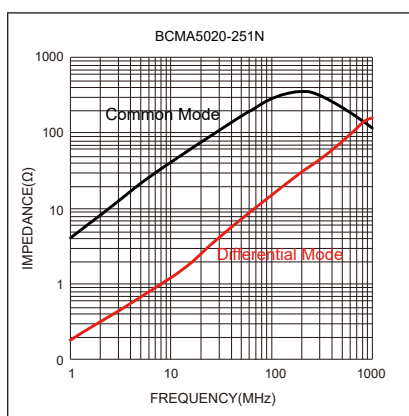
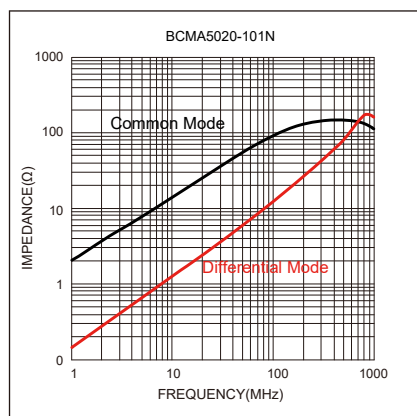


## Electrical Properties:

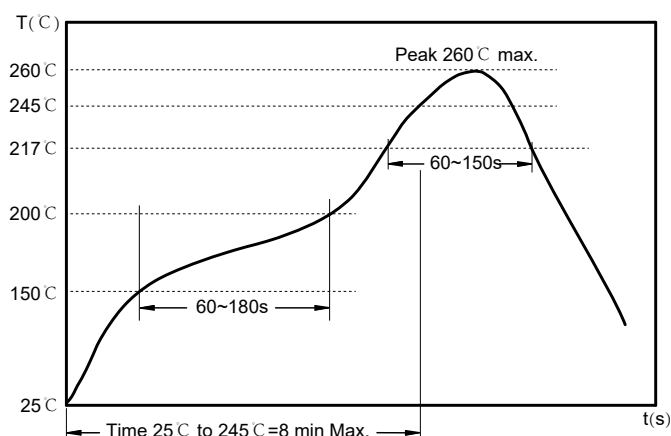
| Part No       | Z@100MHz<br>Typ.<br>(Ω) | I <sub>R</sub><br>Max.<br>(A) | R <sub>DC</sub><br>Max.<br>(mΩ) | V <sub>DC</sub><br>Max.<br>(Volts) | IR<br>Min.<br>(MΩ) |
|---------------|-------------------------|-------------------------------|---------------------------------|------------------------------------|--------------------|
| BCMA5020-101N | 100                     | 6.0                           | 13                              | 50                                 | 10                 |
| BCMA5020-251N | 250                     | 5.0                           | 20                              | 50                                 | 10                 |
| BCMA5020-501N | 500                     | 4.0                           | 27                              | 50                                 | 10                 |
| BCMA5020-102N | 1000                    | 2.0                           | 34                              | 50                                 | 10                 |
| BCMA5020-142N | 1400                    | 1.5                           | 56                              | 50                                 | 10                 |
| BCMA5020-152N | 1500                    | 1.5                           | 56                              | 50                                 | 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.

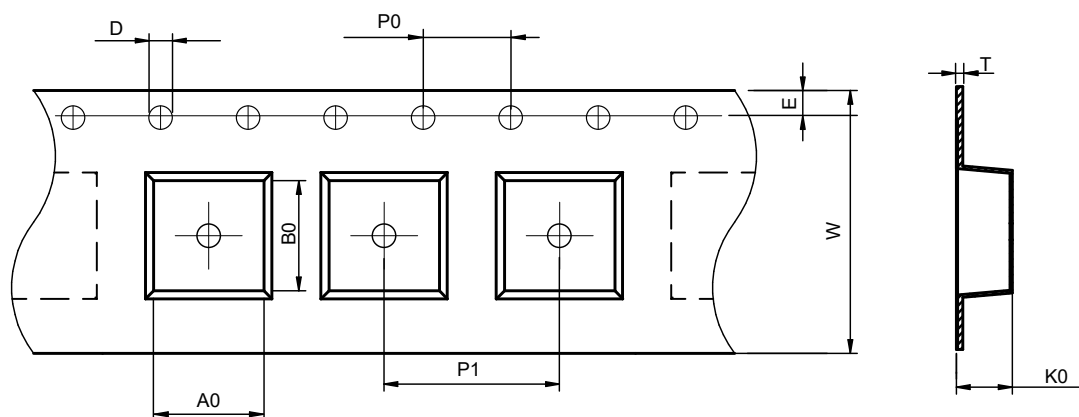
Max temperature: 260 °C.

Max time at max temperature: 10 sec.

Allowed Reflow time: 3x max.

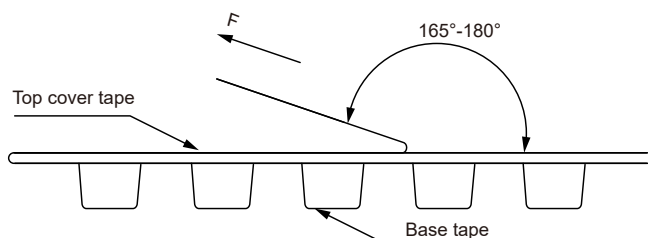
## Packaging Information:

### Tape Dimension:



| Series   | A0 (mm)  | B0 (mm)  | D (mm)  | P0 (mm) | P1 (mm) | W (mm)   | K0 (mm) | E (mm)   | T (mm)    |
|----------|----------|----------|---------|---------|---------|----------|---------|----------|-----------|
| BCMA5020 | 5.65±0.1 | 5.65±0.1 | 1.5±0.1 | 4.0±0.1 | 8.0±0.1 | 12.0±0.3 | 2.7±0.1 | 1.75±0.1 | 0.40±0.05 |

### Peel force of top cover tape:

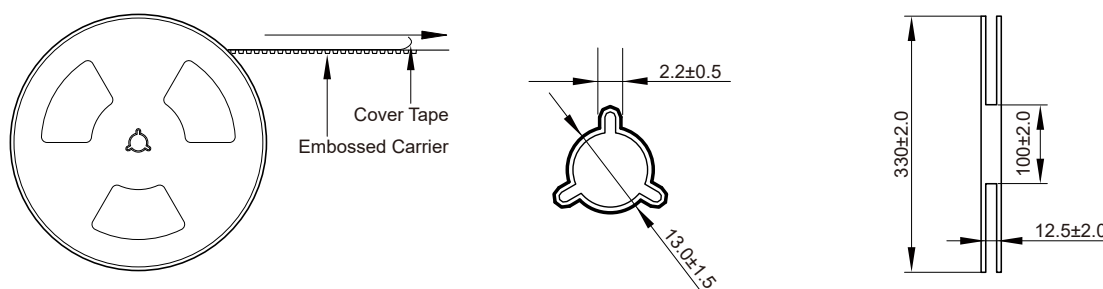


The peel force of top cover tape shall be between 0.10 to 1.17 N

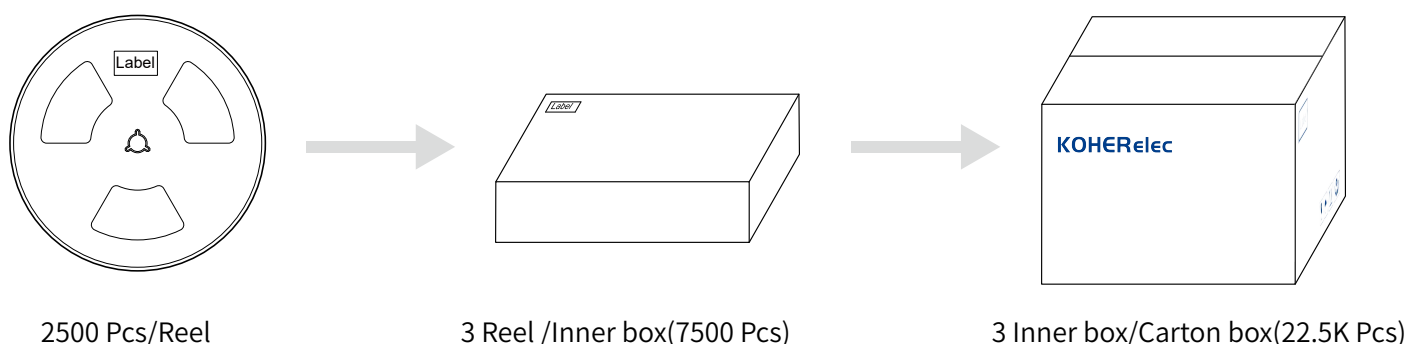
### Product Marking:

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

## 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.