

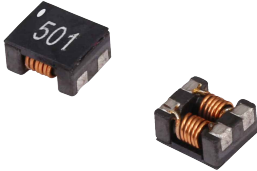


**THE DATASHEET OF  
BCMA4520-301N**



## BCMA Series

### Common Mode Filters For Automotive Power Line Size 4520



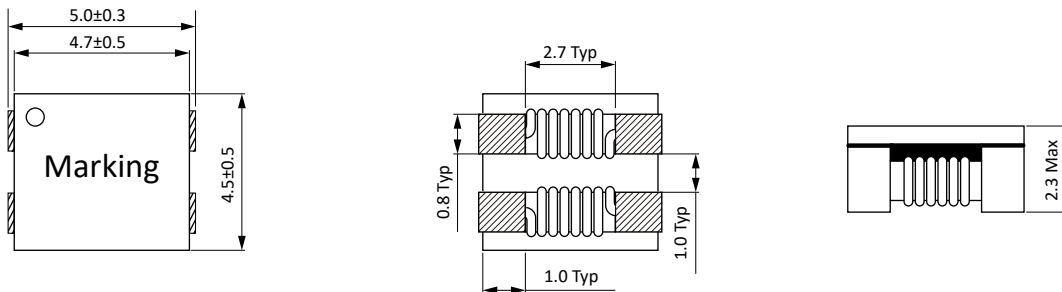
#### FEATURES

- 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: 1000pcs

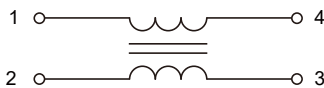
#### APPLICATION

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

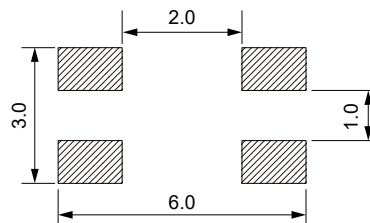
#### Dimensions: [mm]



#### Schematic:



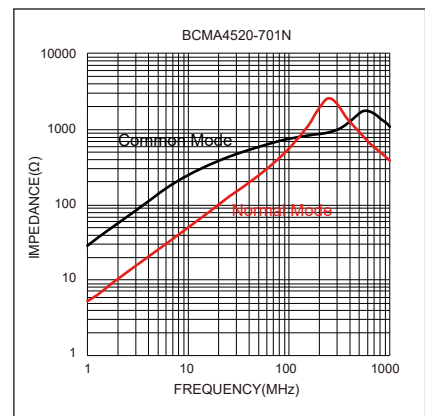
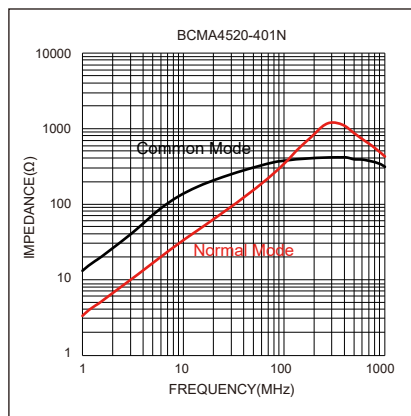
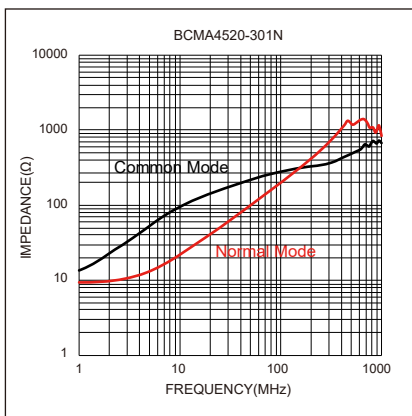
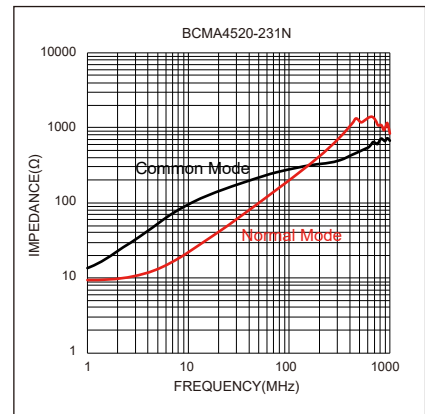
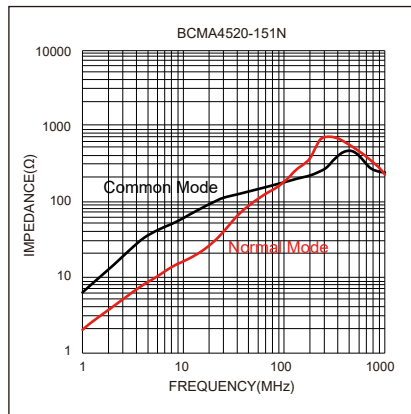
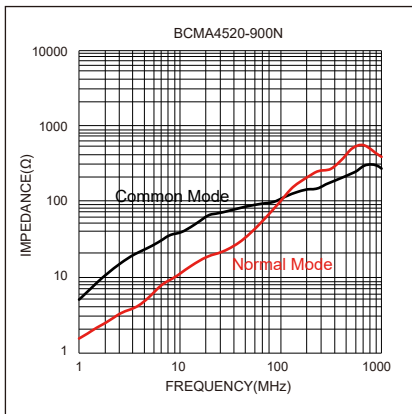
#### Land Pattern: [mm]

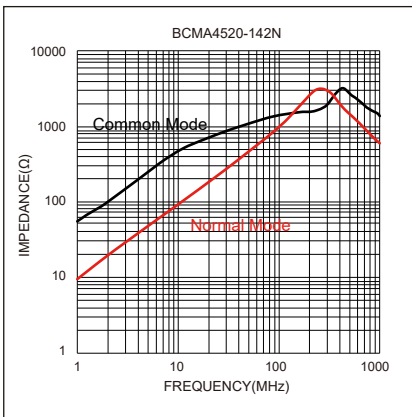
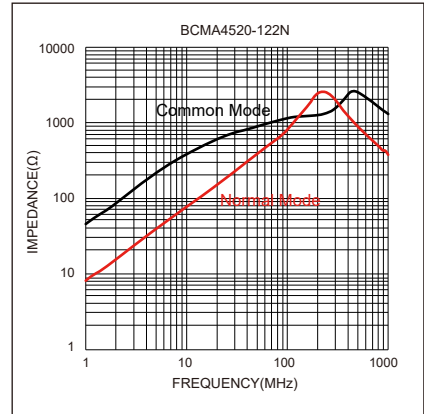
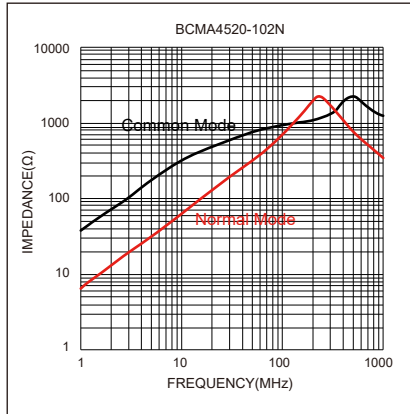
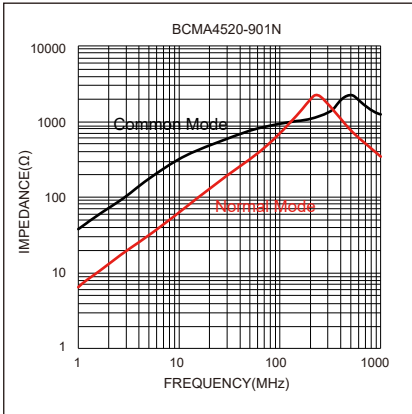


Electrical Properties:

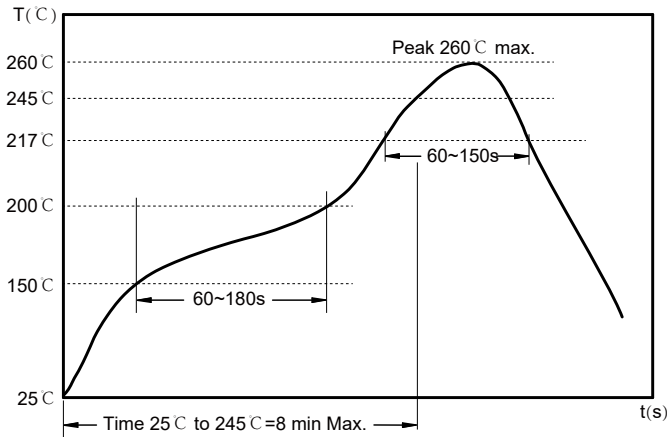
Part No	Impedance @ 100 MHz Min. (Ω)	Impedance @ 100 MHz Typ. (Ω)	DC Resistance Max. (mΩ)	Rated Current Max. (A)	Rated Volt Max. (V)	IR Min. (MΩ)
BCMA4520-900N	60	90	35	3.2	125	10
BCMA4520-151N	90	150	40	3.1	125	10
BCMA4520-231N	180	230	45	3.0	125	10
BCMA4520-301N	200	300	45	3.0	125	10
BCMA4520-401N	300	400	50	2.5	125	10
BCMA4520-701N	500	700	59	2.2	125	10
BCMA4520-901N	650	900	68	2.1	125	10
BCMA4520-102N	800	1000	68	2.1	125	10
BCMA4520-122N	1000	1200	74	2.0	125	10
BCMA4520-142N	1200	1400	81	1.9	125	10

Typical Electrical Characteristics:





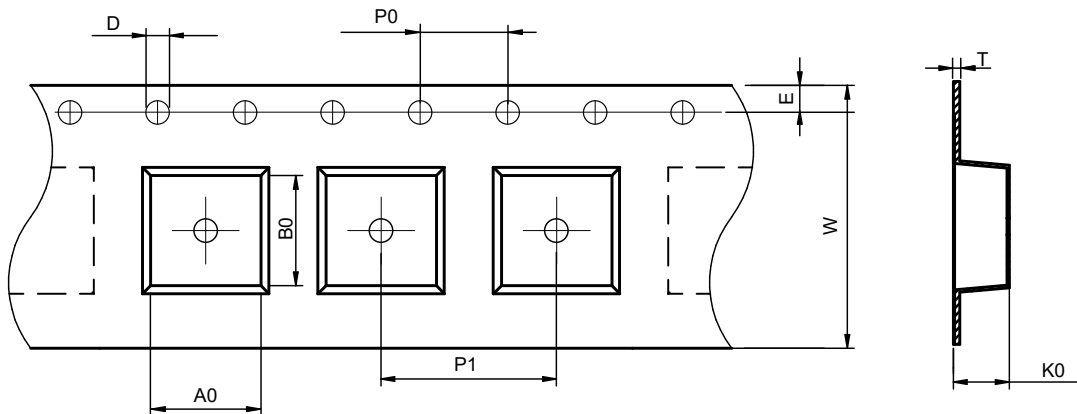
Soldering Reflow:



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:

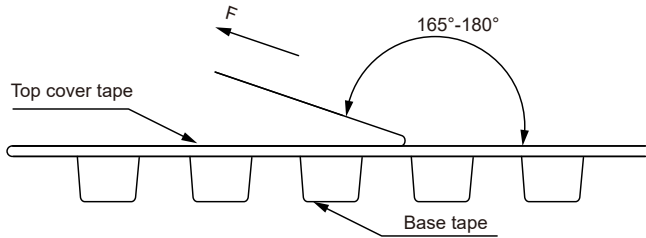


Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
BCMA4520	4.8±0.1	5.4±0.1	1.5±0.1	4.0±0.1	8.0±0.1	12.0±0.3	2.3±0.1	1.75±0.1	0.35±0.05

Product Marking:

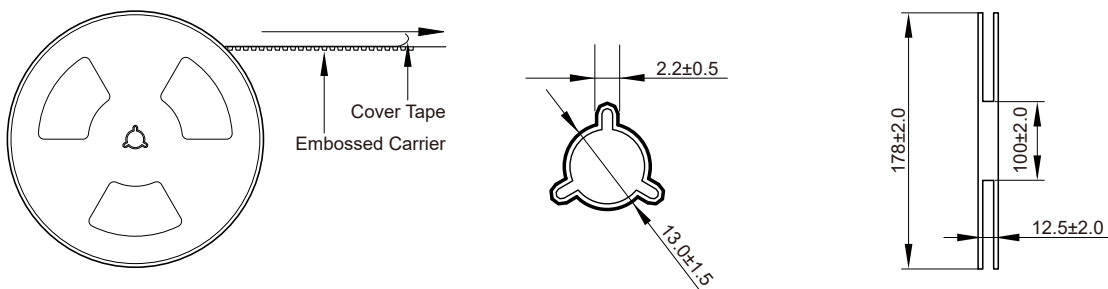
Marking	Dot+Printing (Impedance)
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Peel force of top cover tape:

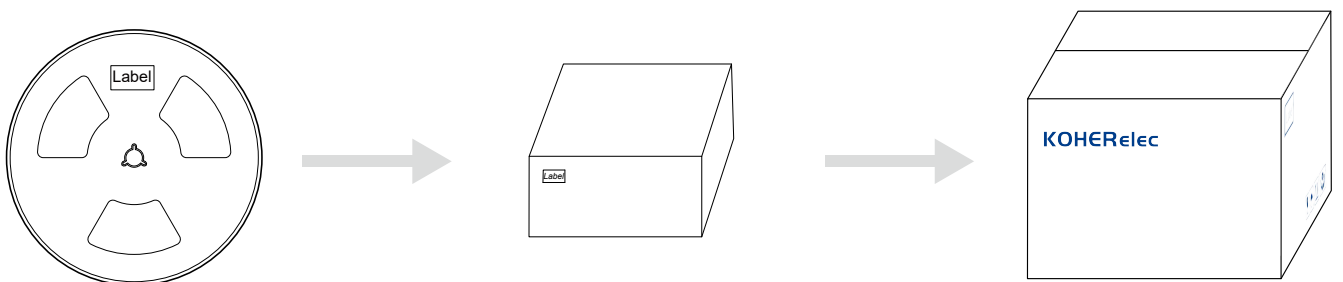


The peel force of top cover tape shall be between 0.10 to 1.17 N

Reel Dimension: [mm]



Packaging Quantity:



1000 Pcs/Reel

5 Reel /Inner box( 5000 Pcs)

8 Inner box/Carton box(40K Pcs)

## 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 BCMA4520-301N on WIN SOURCE](#)
- ⊖ [KOHERShanghaiElectronics Co.,Ltd Information](#)

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- ✓ Alternative Solution
- ✓ Excess Inventory Management