

# FBHA S Series

## Chip Ferrite Bead High Current Type

### Size 0402



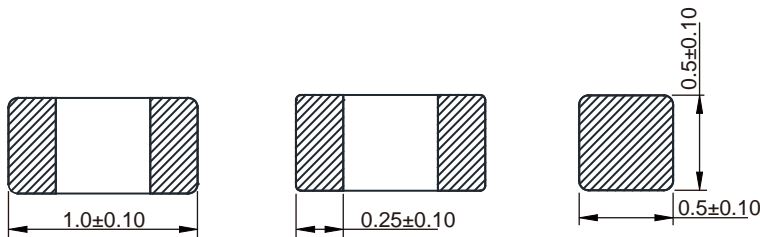
#### FEATURES

- Noise reduction solution for power line.
- Compared to the FBA series, has low direct current resistance for compatibility with large currents, optimal for low power consumption. Various frequency characteristics with 2 materials of different features for countermeasures against everything from general signals to high-speed signals.
- Performs well even in signal lines where low direct current resistance is required.
- AEC-Q200 qualified.
- Operating temperature: -55 to +150 °C (including self-temperature rise)
- Quantity: 10000PCS

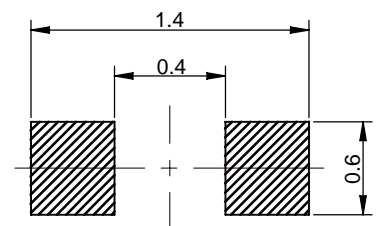
#### APPLICATION

- Power line filter for body controls, and car mul media etc.

#### Dimensions: [mm]



#### Land Pattern: [mm]

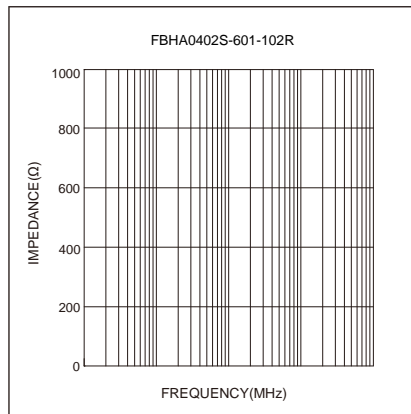
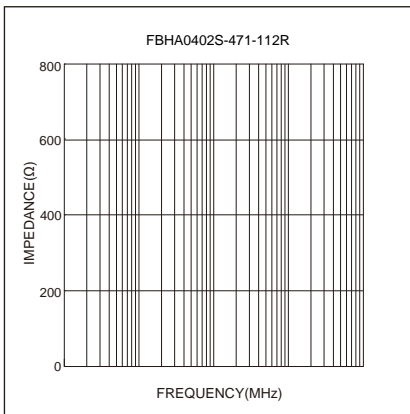
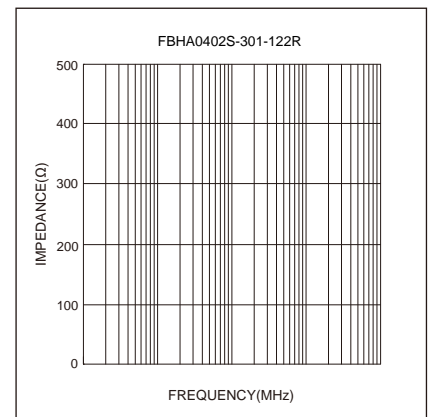
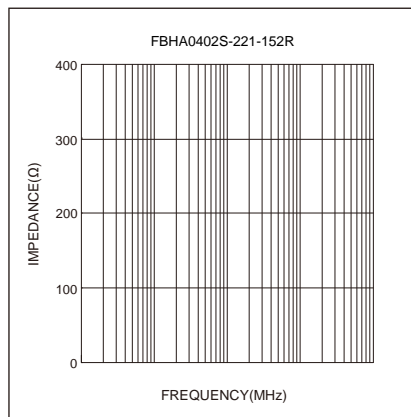
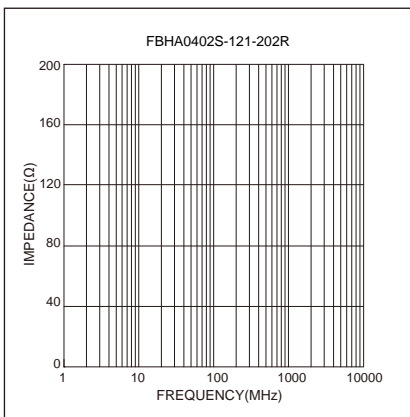
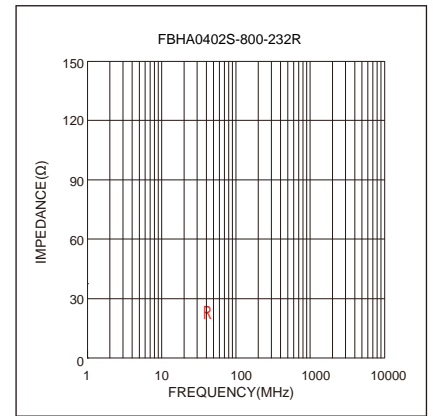
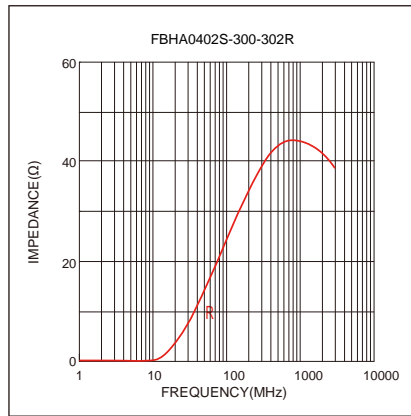
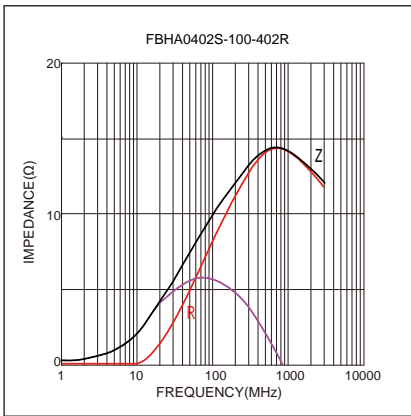


#### Electrical Properties:

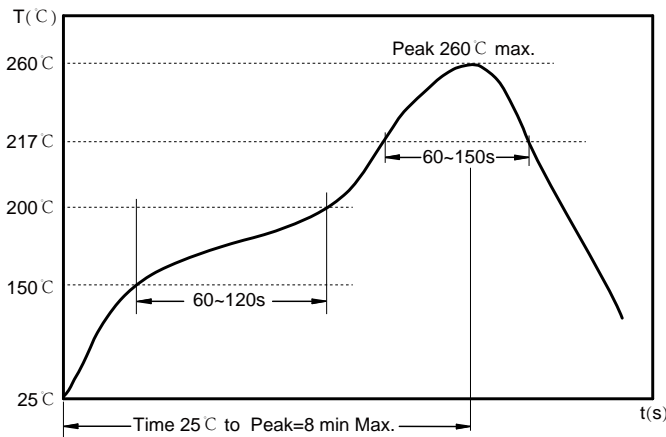
	( $\Omega$ )		( $\Omega$ )	(mA)
FBHA0402S-100-402R	10	±25%	0.018	4000
FBHA0402S-300-302R	30	±25%	0.022	3000
FBHA0402S-800-232R	80	±25%	0.038	2300
FBHA0402S-121-202R	120	±25%	0.050	2000
FBHA0402S-221-152R	220	±25%	0.095	1500
FBHA0402S-301-122R	300	±25%	0.150	1200
FBHA0402S-471-112R	470	±25%	0.180	1100
FBHA0402S-601-102R	600	±25%	0.200	1000

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 / 60~120 sec.

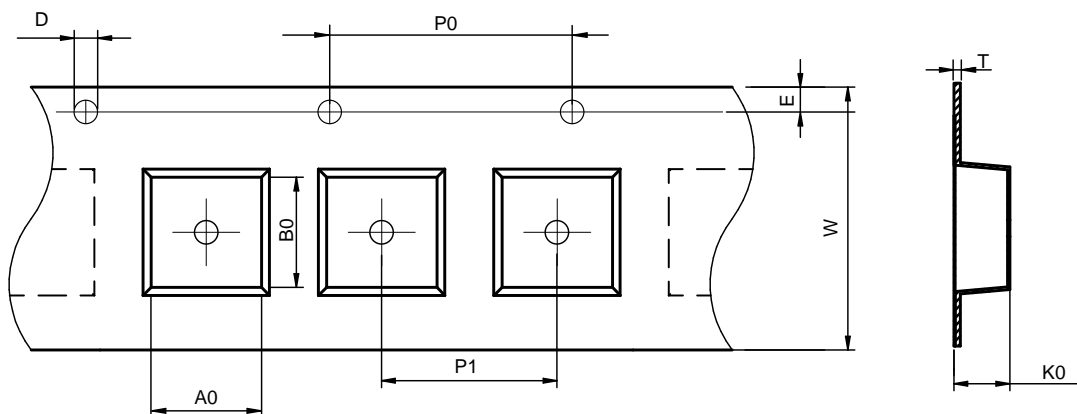
Allowed time above 217°C : 60~150 sec.

Max temperature: 260°C .

Allowed Reflow time: 3x max.

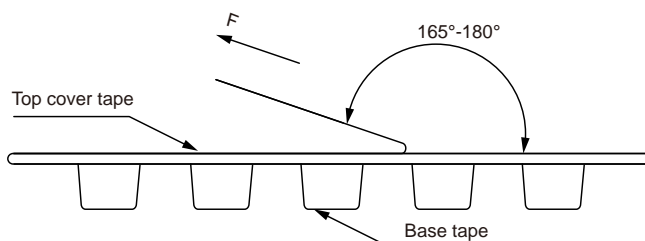
## Packaging Information:

### Tape Dimension:



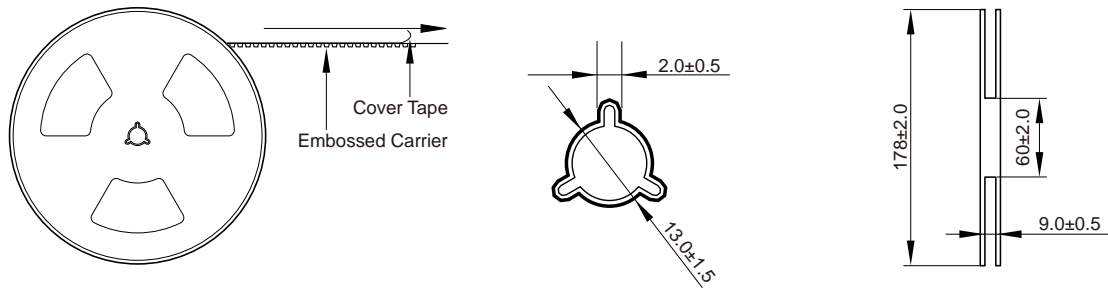
Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
FBHA0402S	0.62±0.03	1.12±0.03	1.5±0.1	4.0±0.1	2.0±0.1	8.0±0.3	0.60±0.03	1.75±0.1	0.60±0.03

### Peel force of top cover tape:

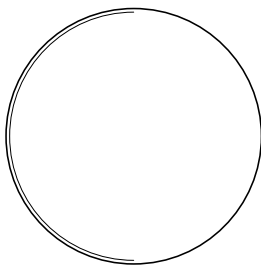


The peel force of top cover tape shall be between 0.14 to 0.58 N

## Reel Dimension: [mm]



## Packaging Quantity:



10000 Pcs/Reel

5 Reel /Inner box( 50K Pcs)

8 Inner box/Carton box(400K 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.