

FBE Series
SMD EMI Suppression Ferrite Bead
Size 0603



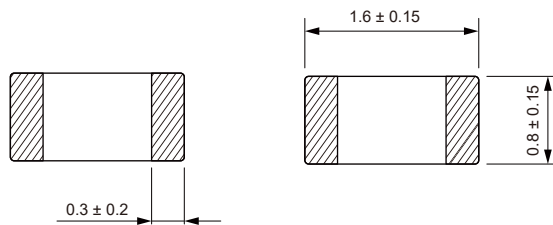
FEATURES

- Monolithic inorganic material construction.
- Closed magnetic circuit avoids crosstalk.
- Suitable for reflow soldering.
- Available in various sizes.
- Operating temperature: -55 to +125 °C
- Quantity: 4000pcs

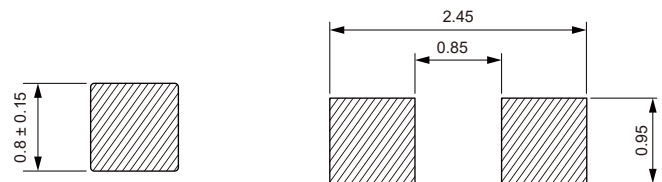
APPLICATION

- Data lines and low power lines
- Connection between digital and analog circuit

Dimensions: [mm]



Land Pattern: [mm]



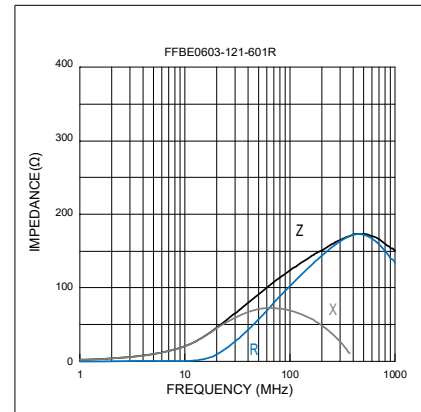
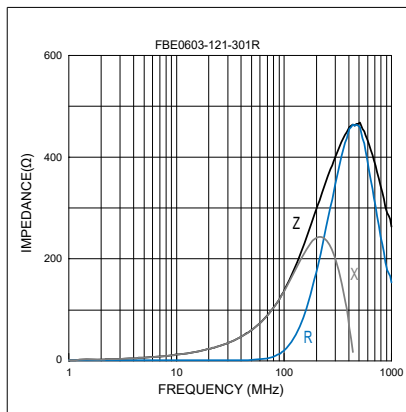
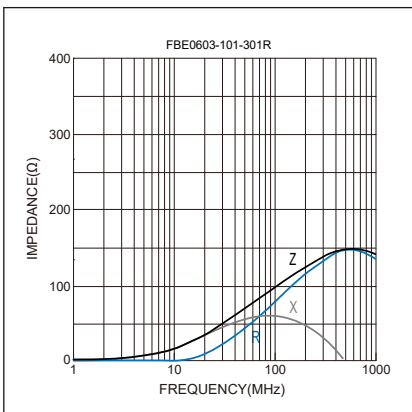
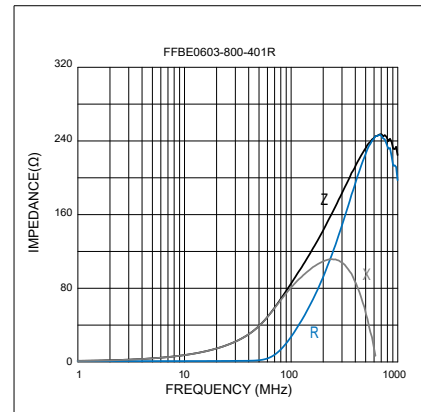
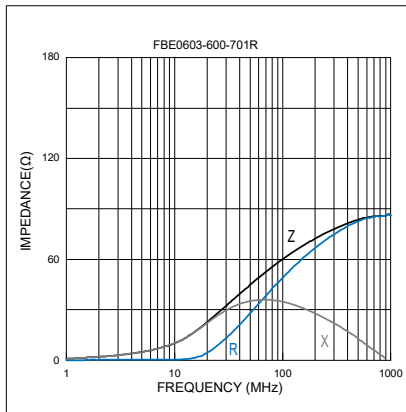
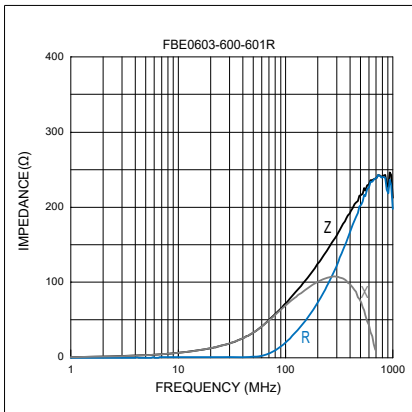
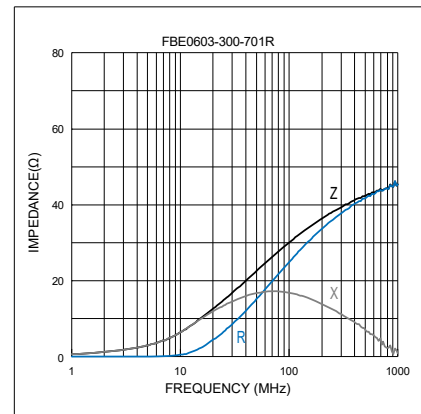
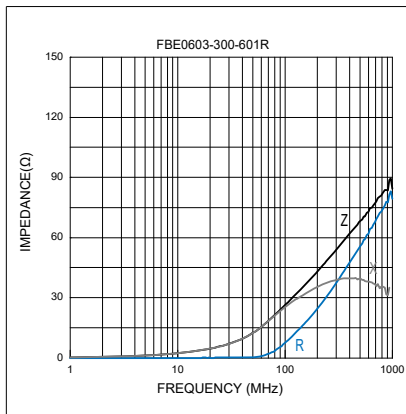
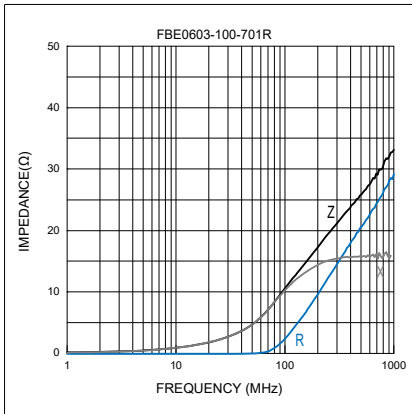
Electrical Properties:

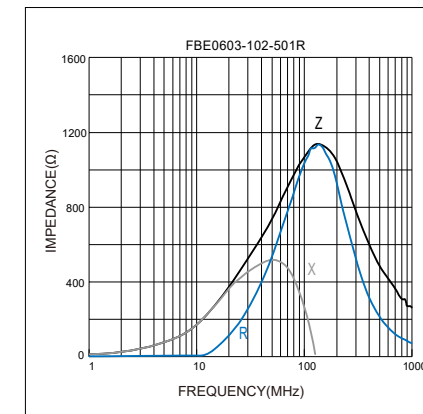
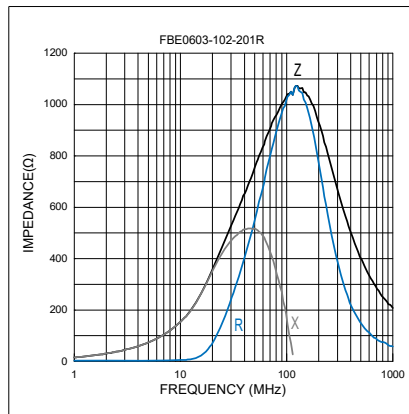
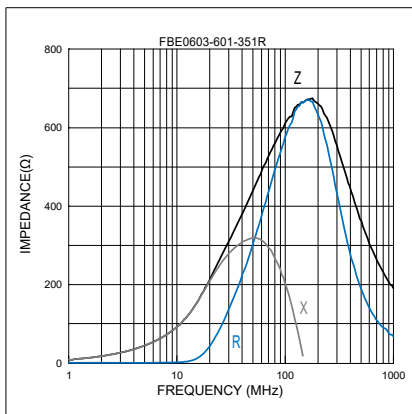
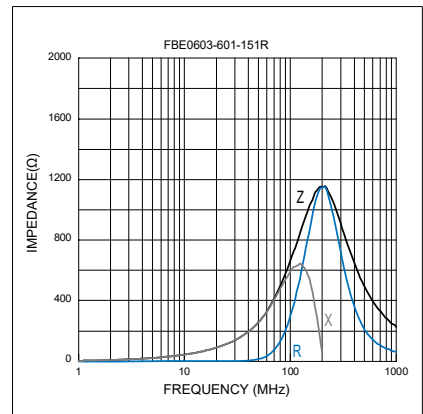
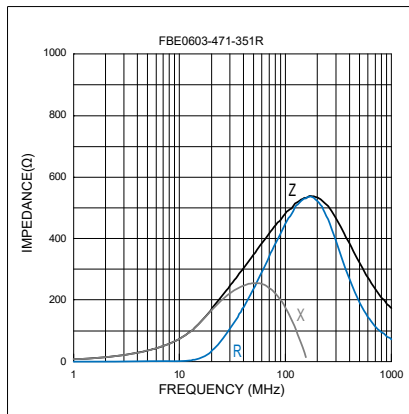
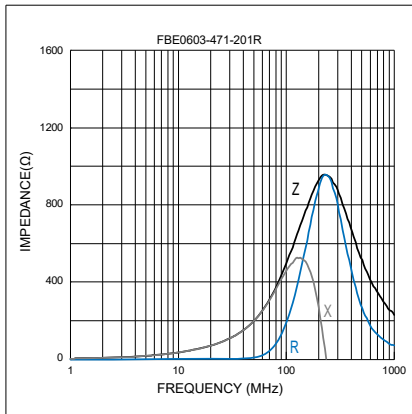
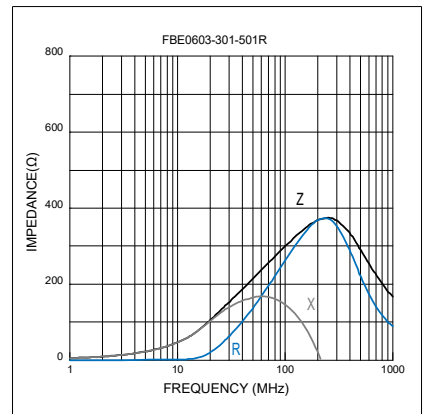
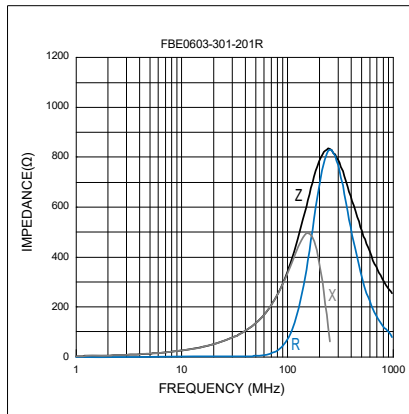
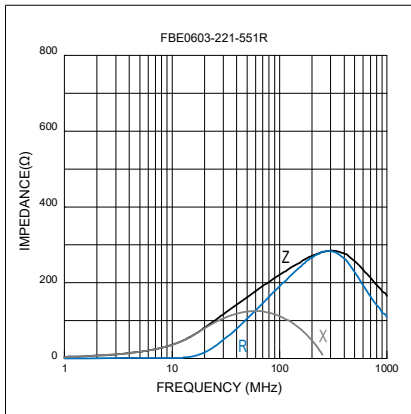
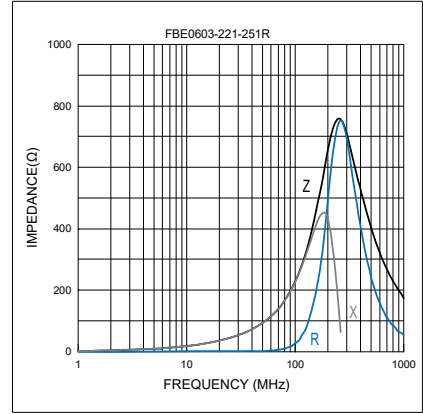
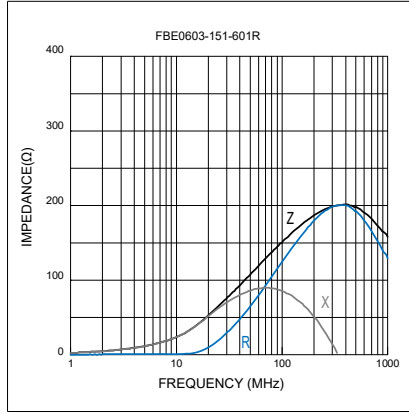
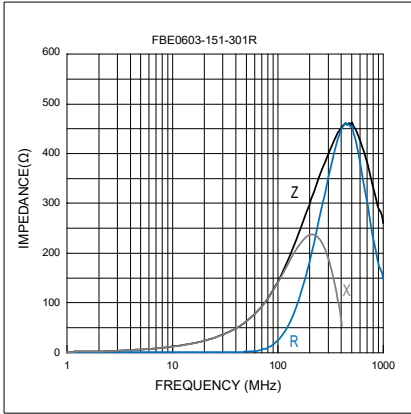
Part No	Impedance @ 100MHz (Ω)	Tolerance	Temperature Rise Current Max. (mA)	DC Resistance Max. (Ω)
FBE0603-100-701R	10	±25%	700	0.20
FBE0603-300-601R	30	±25%	600	0.25
FBE0603-300-701R	30	±25%	700	0.20
FBE0603-600-601R	60	±25%	600	0.30
FBE0603-600-701R	60	±25%	700	0.20
FBE0603-800-401R	80	±25%	400	0.30
FBE0603-101-301R	100	±25%	300	0.20
FBE0603-121-301R	120	±25%	300	0.40
FBE0603-121-601R	120	±25%	600	0.25
FBE0603-151-301R	150	±25%	300	0.40
FBE0603-151-601R	150	±25%	600	0.25
FBE0603-221-251R	220	±25%	250	0.60
FBE0603-221-551R	220	±25%	550	0.30
FBE0603-301-201R	300	±25%	200	0.80
FBE0603-301-501R	300	±25%	500	0.35
FBE0603-471-201R	470	±25%	200	0.85
FBE0603-471-351R	470	±25%	350	0.45
FBE0603-601-151R	600	±25%	150	1.20

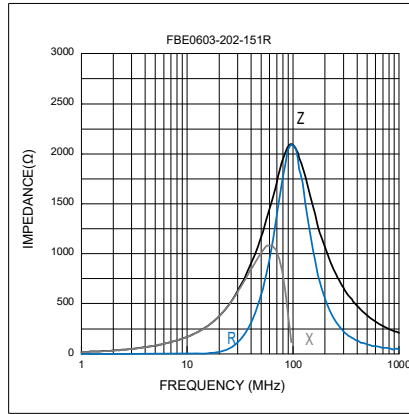
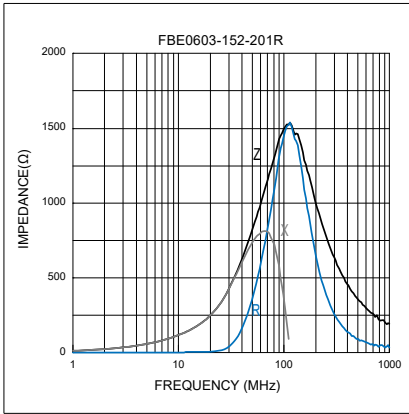
Part No	Impedance @ 100MHz (Ω)	Tolerance	Temperature Rise Current Max. (mA)	DC Resistance Max. (Ω)
FBE0603-601-351R	600	±25%	350	0.50
FBE0603-102-201R	1000	±25%	200	0.70
FBE0603-102-501R	1000	±25%	500	0.70
FBE0603-152-201R	1500	±25%	200	1.00
FBE0603-202-151R	2000	±25%	150	1.20

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

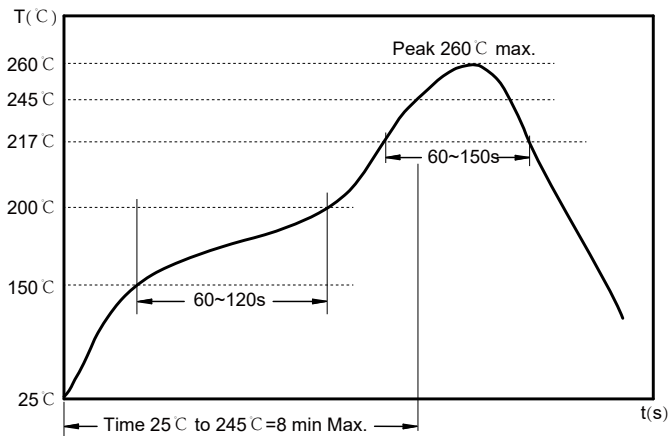
Impedance & Frequency Characteristics:







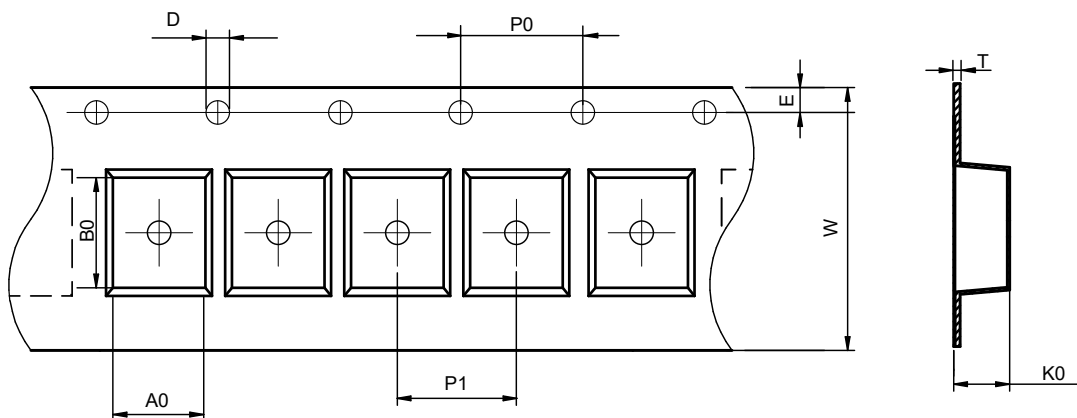
Soldering Reflow:



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.

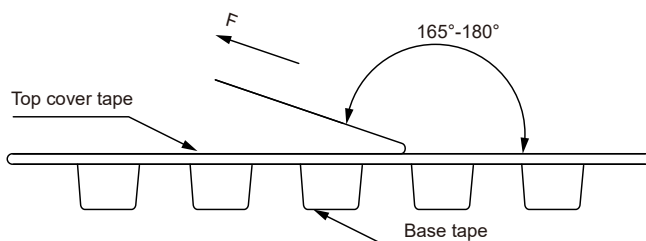
Packaging Information:

Tape Dimension:



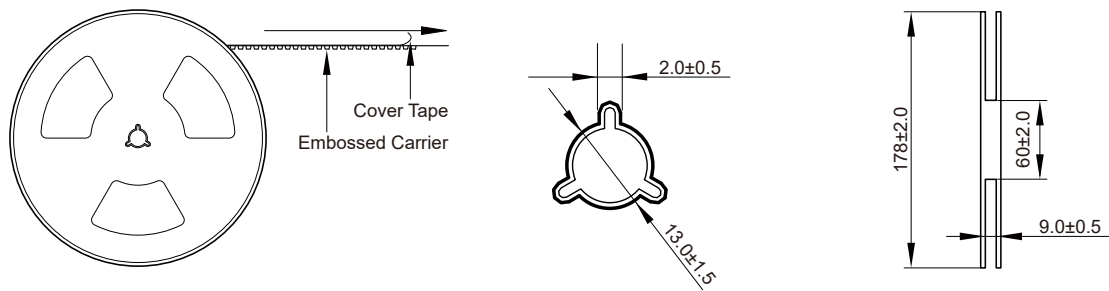
Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
FBE0603	0.96±0.05	1.80±0.05	1.5±0.1	4.0±0.1	4.0±0.1	8.0±0.3	0.95±0.1	1.75±0.1	0.95±0.05

Peel force of top cover tape:

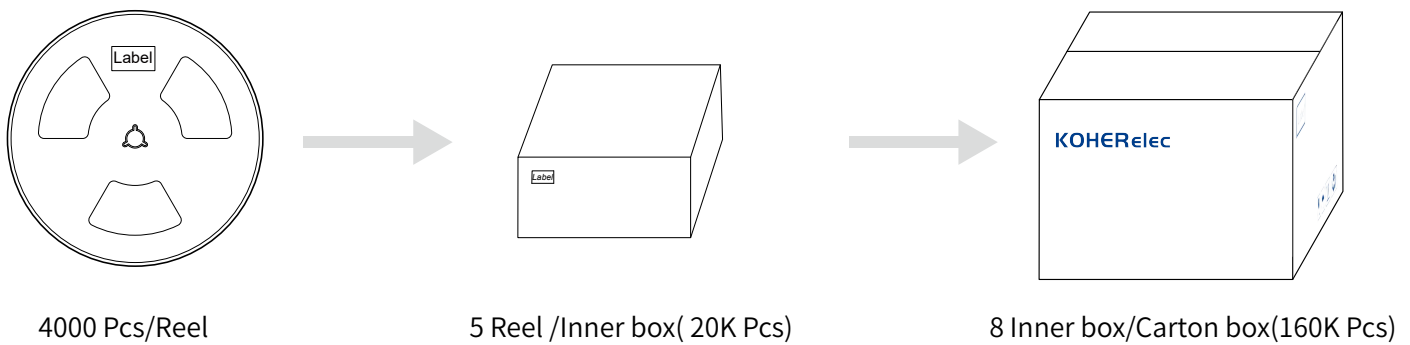


The peel force of top cover tape shall be between 0.14 to 0.58 N

Reel Dimension: [mm]



Packaging Quantity:



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.