

Ferrite Beads

For EMI Suppression

The FBS and FBM Series are used for EMI suppression. These inductors suppress electro-magnetic wave noise by increased impedance, especially by increased resistance at noise frequency.

FBS Series: The FBS Series is composed of a single layer internal electrode that is for low impedance and low DC resistance.

FBM Series: The FBM Series displays high impedance because it is composed of multi-layered internal electrodes and has excellent attenuation characteristics for wide band frequencies.

Features

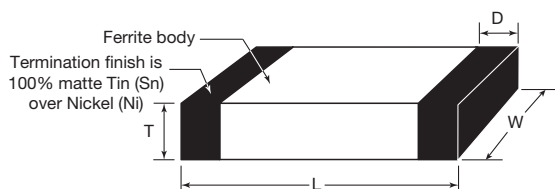
- Smallest beads possible for surface mounting and high impedance
- Perfect shape for automatic mounting with no directionality
- Excellent solderability and high heat resistance for either flow or reflow soldering
- Monolithic inorganic material construction for high reliability
- Closed magnetic circuit configuration avoids crosstalk and is suitable for high density PCBs

Application

- High frequency EMI prevention in computers, printers, VCRs, TVs and portable telephones.

Unit: mm (inch)

Dimensions



Size	L	W	T	D
0402	1.0 ± 0.05 (0.040 ± 0.002)	0.5 ± 0.05 (0.020 ± 0.002)	0.5 ± 0.05 (0.020 ± 0.002)	0.25 ± 0.1 (0.010 ± 0.004)
0603	1.6 ± 0.15 (0.063 ± 0.006)	0.8 ± 0.15 (0.031 ± 0.006)	0.8 ± 0.15 (0.031 ± 0.006)	0.3 ± 0.2 (0.012 ± 0.008)
0805	2.0 ± 0.2 (0.079 ± 0.008)	1.25 ± 0.2 (0.050 ± 0.008)	0.9 ± 0.2 (0.036 ± 0.008)	0.5 ± 0.3 (0.020 ± 0.012)
1206	3.2 ± 0.2 (0.126 ± 0.008)	1.6 ± 0.2 (0.063 ± 0.008)	1.1 ± 0.2 (0.043 ± 0.008)	0.5 ± 0.3 (0.020 ± 0.012)
1210	3.2 ± 0.2 (0.126 ± 0.008)	2.5 ± 0.2 (0.098 ± 0.008)	1.3 ± 0.2 (0.051 ± 0.008)	0.5 ± 0.3 (0.020 ± 0.012)
1806	4.5 ± 0.2 (0.177 ± 0.008)	1.6 ± 0.2 (0.063 ± 0.008)	1.6 ± 0.2 (0.063 ± 0.008)	0.5 ± 0.3 (0.020 ± 0.012)
1812	4.5 ± 0.2 (0.177 ± 0.008)	3.2 ± 0.2 (0.126 ± 0.008)	1.5 ± 0.2 (0.060 ± 0.008)	0.5 ± 0.3 (0.020 ± 0.012)

Operating Temperature Range -55 to +125° C

Storage Temperature Range -10 to +40° C

How To Order

FBM0805

Series

Standard termination finish for this product is 100% matte Tin (Sn)

—

121

Impedance Values

E

Packaging
E: Embossed Tape
P: Paper Tape

All components in this section are RoHS compliant per the EU directives and definitions.

5900 Shepherd Mountain Cove • Austin, TX 78730
Phone: 512 / 794-0081 • Fax: 512 / 794-0087 • Toll Free: 800 / 950-8365
e-mail: sales@venkel.com • www.venkel.com



VENKEL LTD.

Standard Part Numbers & Data

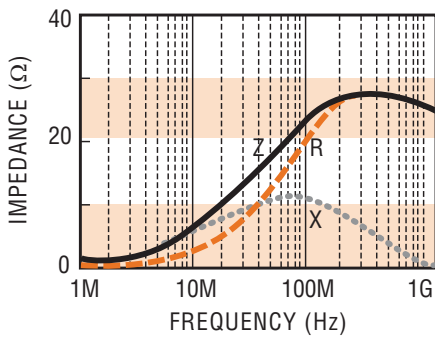
FBS SERIES DATA TABLE

Series Part Number	Thickness (mm)	Impedance (Ω) \pm 25% (at 100MHz)	DC resistance (Ω) max.	Rated current (mA) max.
FBS 0603-260 □	0.8 \pm 0.15	26	0.08	1000
FBS 0603-330 □	0.8 \pm 0.15	33	0.08	1000
FBS 0805-110 □	0.9 \pm 0.2	11	0.05	2000
FBS 0805-260 □	0.9 \pm 0.2	26	0.05	2000
FBS 0805-330 □	0.9 \pm 0.2	33	0.05	1000
FBS 0805-470 □	0.9 \pm 0.2	47	0.05	1000
FBS 1206-260 □	1.1 \pm 0.2	26	0.05	2000
FBS 1206-310 □	1.1 \pm 0.2	31	0.05	2000
FBS 1206-500 □	1.1 \pm 0.2	50	0.05	2000
FBS 1206-700 □	1.1 \pm 0.2	70	0.05	2000
FBS 1210-310 □	1.3 \pm 0.2	31	0.025	2500
FBS 1210-600 □	1.3 \pm 0.2	60	0.025	1500
FBS 1806-800 □	1.6 \pm 0.2	80	0.03	600
FBS 1806-151 □	1.6 \pm 0.2	150	0.05	300
FBS 1812-131 □	1.5 \pm 0.2	130	0.04	600
FBS 1812-151 □	1.5 \pm 0.2	150	0.04	600

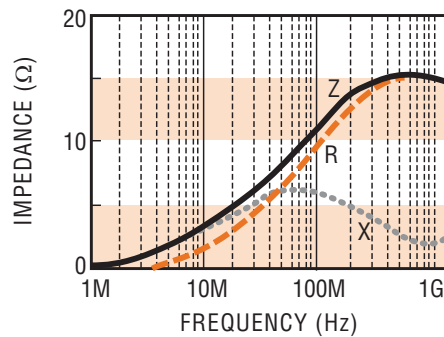
Venkel Ltd. may also be able to provide custom products to meet specific customer needs. Please consult your sales representative.

FBS SERIES

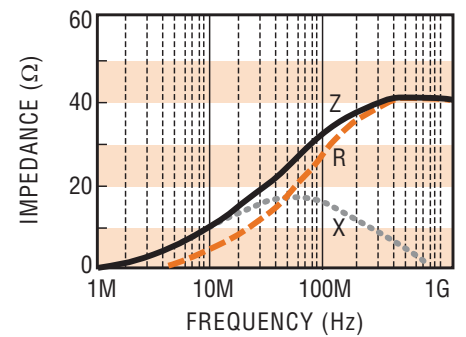
FBS0603-260 □



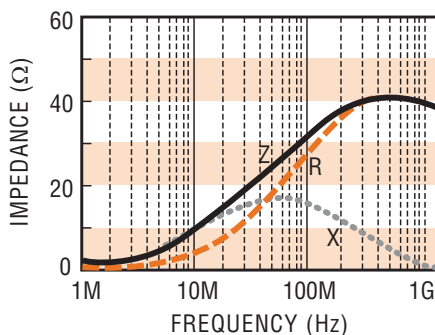
FBS0805-110 □



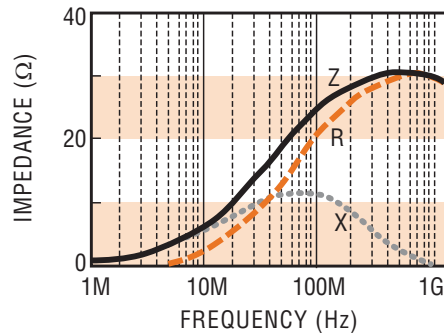
FBS0805-330 □



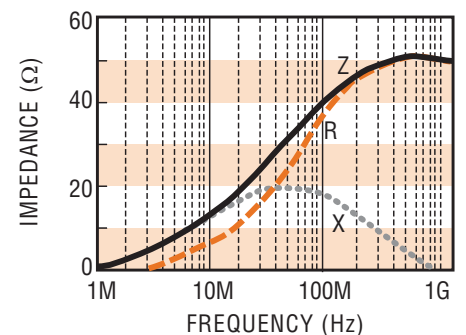
FBS0603-330 □



FBS0805-260 □



FBS0805-470 □



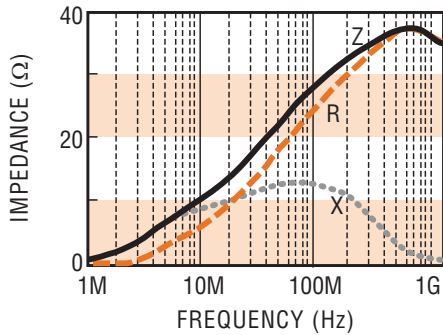
5900 Shepherd Mountain Cove • Austin, TX 78730
 Phone: 512 / 794-0081 • Fax: 512 / 794-0087 • Toll Free: 800 / 950-8365
 e-mail: sales@venkel.com • www.venkel.com



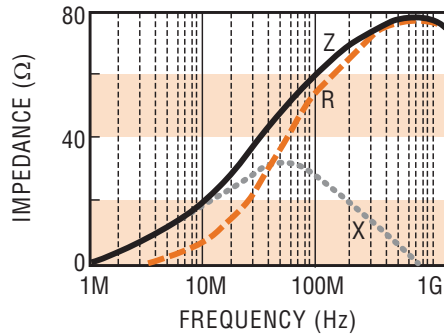
VENKEL LTD.

FBS SERIES

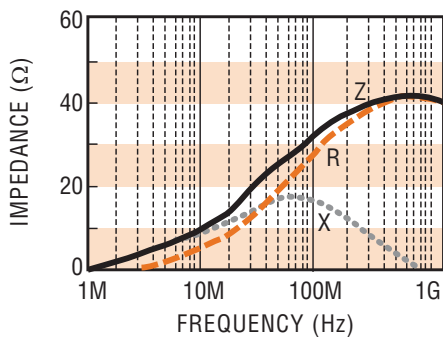
FBS1206-260 □



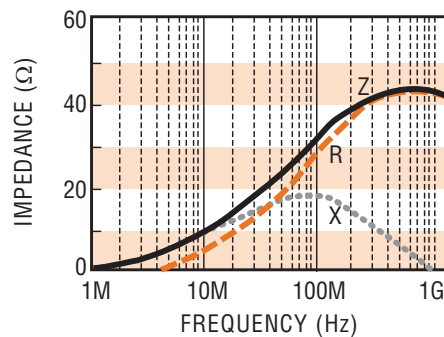
FBS1206-700 □



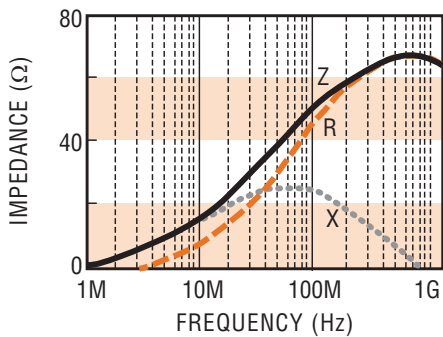
FBS1206-310 □



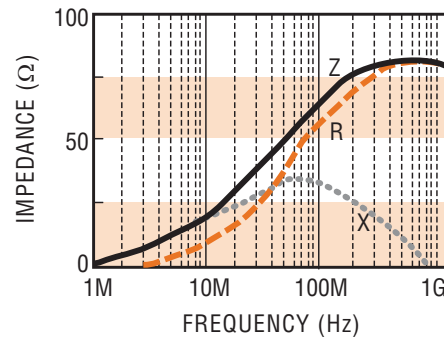
FBS1210-310 □



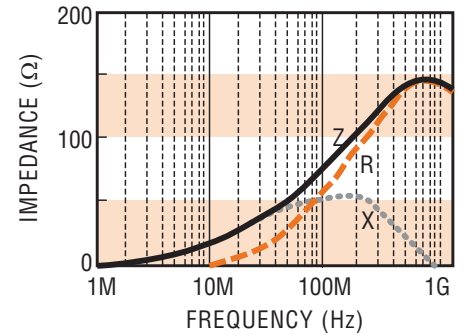
FBS1206-500 □



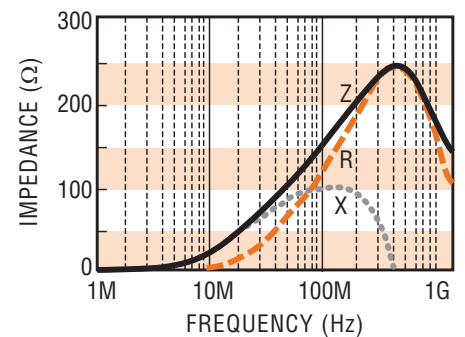
FBS1210-600 □



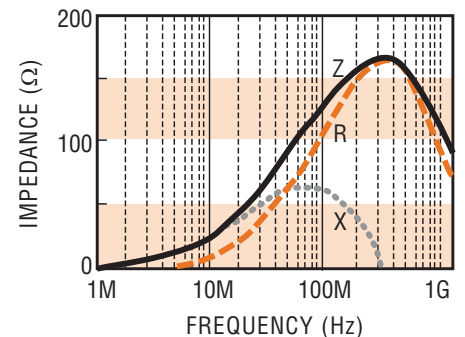
FBS1806-800 □



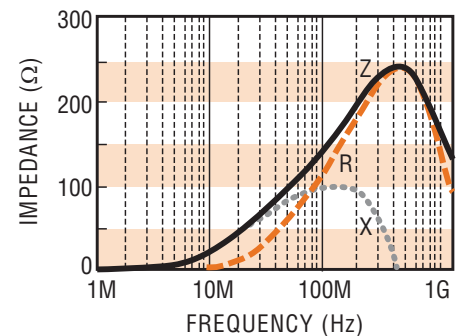
FBS1806-151 □



FBS1812-131 □



FBS1812-151 □

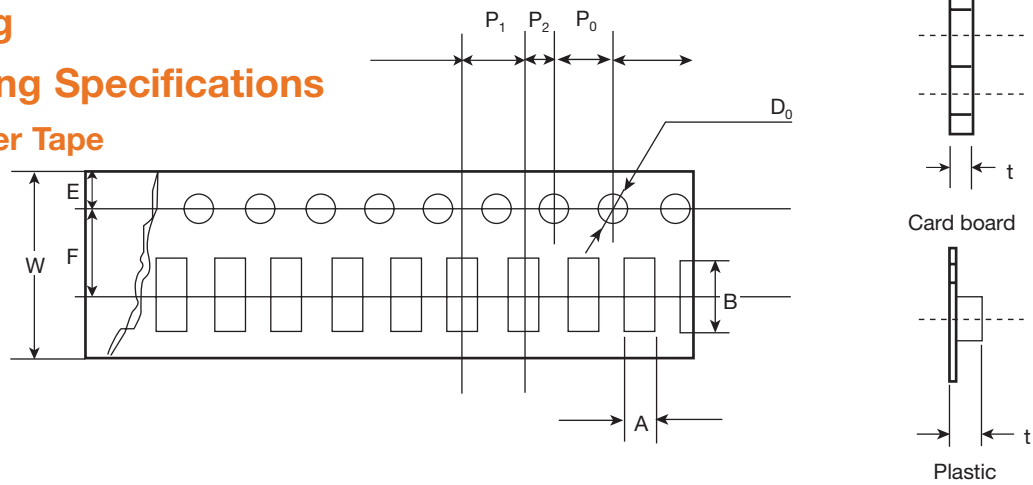


Ferrite Beads

Packaging

Taping Specifications

Carrier Tape

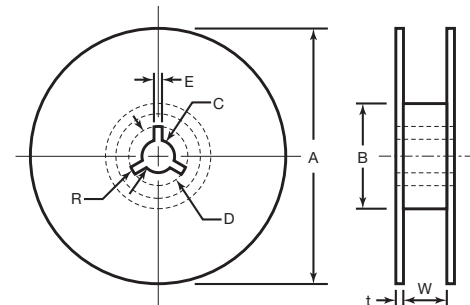


Type	0402	0603	0805	1206	1210	1806	1812
Tape	Paper	Paper	Embossed	Embossed	Embossed	Embossed	Embossed
W	8.0 ± 0.2	8.0 ± 0.2	8.0 ± 0.2	8.0 ± 0.2	8.0 ± 0.2	12.0 ± 0.2	12.0 ± 0.2
F	3.5 ± 0.05	3.5 ± 0.05	3.5 ± 0.05	3.5 ± 0.05	3.5 ± 0.05	5.5 ± 0.05	5.5 ± 0.05
E	1.75 ± 0.1	1.75 ± 0.1	1.75 ± 0.1	1.75 ± 0.1	1.75 ± 0.1	1.75 ± 0.1	1.75 ± 0.1
P ₁	2.0 ± 0.05	4.0 ± 0.1	4.0 ± 0.2	4.0 ± 0.2	4.0 ± 0.1	8.0 ± 0.1	8.0 ± 0.1
P ₂	1.0 ± 0.05	2.0 ± 0.05	2.0 ± 0.05	2.0 ± 0.05	2.0 ± 0.05	2.0 ± 0.05	2.0 ± 0.05
P ₀	4.0 ± 0.1	4.0 ± 0.1	4.0 ± 0.1	4.0 ± 0.1	4.0 ± 0.1	4.0 ± 0.1	4.0 ± 0.1
D ₀	∅ 1.55 ± 0.1	∅ 1.55 ± 0.1	∅ 1.55 ± 0.1	∅ 1.55 ± 0.1	∅ 1.55 ± 0.1	∅ 1.55 ± 0.1	∅ 1.55 ± 0.1
A	0.65 ± 0.1	1.0 ± 0.2	8.45 ± 0.1	1.90 ± 0.1	2.90 ± 0.1	4.9 ± 0.2	4.85 ± 0.1
B	1.15 ± 0.1	1.8 ± 0.2	2.3 ± 0.1	3.5 ± 0.1	3.6 ± 0.1	1.9 ± 0.2	3.5 ± 0.1
t	0.8 max.	1.0 ± 0.1	1.15 ± 0.1	1.137 ± 0.1	1.55 ± 0.1	1.78 ± 0.2	1.75 ± 0.1
EA/Reel	10,000	4,000	4,000	3,000	2,500	2,000	1,000

Unit: mm (inch)

Tape	8mm	12mm
A	178 ± 2	178 ± 2
B	50 ± 1	50 ± 1
C	13.0 ± 0.5	13.0 ± 0.5
D	21.0 ± 0.8	21.0 ± 0.8
E	2.0 ± 0.5	2.0 ± 0.5
W	10.0 ± 1.0	14.0 ± 1.0
t	1.2 ± 0.5	2.0 ± 0.5
R	1.0	1.0

Reel



All components in this section are RoHS compliant per the EU directives and definitions.

5900 Shepherd Mountain Cove • Austin, TX 78730
 Phone: 512 / 794-0081 • Fax: 512 / 794-0087 • Toll Free: 800 / 950-8365
 e-mail: sales@venkel.com • www.venkel.com



VENKEL LTD.