



Part Number: 2743009112  
 Frequency Range: Broadband Frequencies 25-300 MHz (43 material)  
 Description: 43 BEAD ON LEAD  
 Application: Suppression Components  
 Where Used: Board Component  
 Part Type: Beads-on-Leads  
 Preferred Part: ✓

## Mechanical Specifications

Weight: .700 (g)

## Part Type Information

Ferrite suppression beads are supplied assembled on tinned copper wire for automated circuit board assembly.

-Parts with a '2' as the last digit of the part number are supplied taped and reeled per IEC 60286-1 and EIA RS-296-F standards. Taped and reeled parts are supplied 4500 pieces on a 14" reel. Taping details: Component pitch 5 mm. Inside tape spacing 52.5 mm. Tape width 6 mm.

-Beads-on-leads can be supplied bulk packed. The last digit of bulk packed parts is a '1'.

-Wires are oxygen free high conductivity copper with a lead-free tin coating. The resistance of the wire is 3.5 mOhm for the 22 AWG and 2.2 mOhm for the 20 AWG wire.

-Beads-on-leads are controlled for impedances only. The impedances listed are typical values. Minimum impedance values are specified for the + marked frequencies. The minimum guaranteed impedance is the listed impedance less 20%. The impedances of the 73 & 43 beads-on-leads are measured on the 4193A Vector Impedance Analyzer. The 61 beads-on-leads are tested for impedance on the 4191A RF Impedance Analyzer.

-Preferred beads-on-leads are the suggested choice for new designs. Samples are readily available and orders have typically shorter lead times than other beads-on-leads. For any bead-on lead requirement not listed here, feel free to contact our customer service group for availability and pricing.

-Our 'Bead-on-Lead Suppression Kit' (part number 0199000028) is available for prototype evaluation.

-Explanation of Part Numbers: Digits 1&2 = product class, 3&4 = material grade and last digit 1 = bulk packed, 2 = taped and reeled.

**Fair-Play Products Corp.**  
 Your Signal Solution<sup>SM</sup>  
 800.441.1234 • www.fair-play.com

**Mechanical Specifications**

Part	Min	Max	Unit
Length	0.100	0.125	in
Width	0.050	0.060	in
Height	0.020	0.025	in
Weight	0.001	0.002	oz
Material	304 Stainless Steel		
Finish	Polished		
Temperature	-50 to 150 °C		
Humidity	5% to 95% RH		
Shock	1000g		
Vibration	10g		
Storage	1 year		
Lead Time	2 weeks		

**Lead Times**

Quantity	Lead Time
1 - 100	2 weeks
101 - 1000	3 weeks
1001 - 10000	4 weeks
10000+	5 weeks

**Notes:**  
 1. All dimensions are nominal unless otherwise specified.  
 2. Material and finish are subject to change without notice.  
 3. Lead times are based on current inventory levels.  
 4. Contact us for pricing and availability.

**Form Material Constants**

Specific Heat	0.25 cal/g°C
Thermal Conductivity	0.0019 cal/cm·sec·°C
Coefficient of Linear Expansion	6.5 x 10 <sup>-6</sup> /°C
Tensile Strength	4.5 kg/cm <sup>2</sup>
Compression Strength	4.5 kg/cm <sup>2</sup>
Impact Strength	10.0 ft·lb/inch
Modulus (Young's)	2.0 x 10 <sup>10</sup> dyn/cm <sup>2</sup>
Dielectric Strength	1.5 x 10 <sup>6</sup> volt/cm

The above material properties are typical for Fair-File 1000 and 1000 Series.

**Fair-Rite Products Corp.**  
 Your Signal Solution<sup>SM</sup>  
 4000 Old Derby Road, Fairfield, NJ 07004  
 (908) 231-8800 • Fax (908) 231-8801 • www.fair-rite.com

**Part No. 6002**  
**Material No. 6002**  
**Rev. 01**

**DESCRIPTION**  
 Ferrite Bead  
 0.050" Dia. x 0.125" Long x 0.015" Thick  
 1000 Ohms @ 100 MHz  
 0.5 Ohms @ 1 MHz

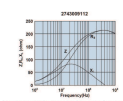
Frequency (MHz)	Impedance (Ohms)
0.1	0.5
1	0.5
10	0.5
100	10
1000	100
10000	1000
100000	10000
1000000	100000
10000000	1000000
100000000	10000000
1000000000	100000000

**Physical Properties & Dimensions**

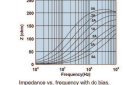
**Electrical Properties & Performance**

**Temperature Characteristics**

**Humidity Characteristics**



Impedance, reactance, and resistance vs. frequency



Impedance vs. frequency with dB gain