

Surface Mount High Current EMI Filters Ferrite Power Beads

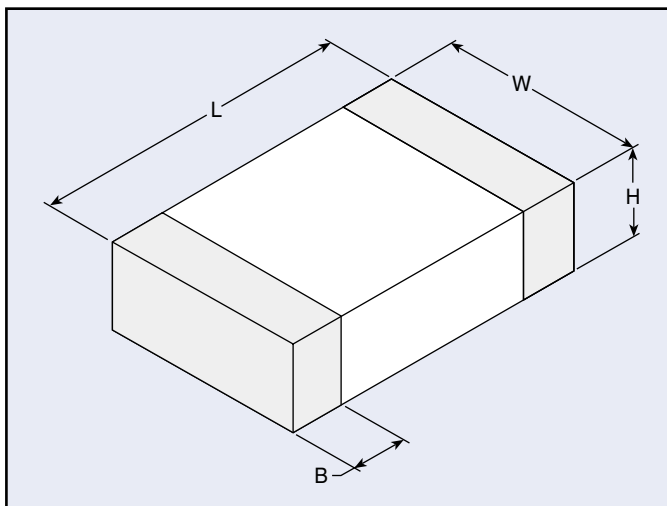


Features

- Rated up to 6 Amps
- Broad range of impedance values available (Standard line has values of 7 Ω to 600 Ω)
- Available in standard EIA/EIAJ chip sizes (0603/1608, 0805/2012, 1206/3216, etc.)
- Excellent solderability is achieved from a nickel barrier with a solder overplate
- Provides EMI attenuation without grounding
- Closed magnetic circuit
- Parts are suitable for flow or re-flow soldering
- Available in tape and reel for easy placement
- Operational temperature range of -55°C to +125°C

Applications

- Telecommunications equipment (cellular phones, cordless phones, faxes and ISDN's)
- Digital audio/visual equipment (TV, HDTV, VTR, DVD, CATV tuners and etc.)
- GPS and car navigation equipment
- High speed clocks
- Consumer electronics
- Signal lines
- LAN and WAN hardware



Part Numbering System

Example: **FPB-0805-A301P7**

FPB	-	0805	-	A	301	P	7
Series Ferrite Power Beads		Part Size EIA Size (Length x Width)		Material Characteristic Determined by the desired electrical characteristic	Impedance Value 30(1) (1) = the # of zeros that will follow the first two digits Example: 30(1) = 30 followed by 1 zero = 300 Ohms	Tolerance Code Standard Value is P P = $\pm 25\%$ M = $\pm 20\%$	Packaging 7 = 7 inch reel 3 = 13 inch reel

Land Patterns and Soldering Temperature Profiles

- See page 45.

Packaging Specifications and Storage Requirements

- See page 46.

Surface Mount High Current EMI Filters Ferrite Power Beads

Physical Characteristics

Size		Physical Dimensions			
EIA	EIAJ	Length (L)	Width (W)	Height (H)	Termination Band (B)
0603	1608	0.063 ± 0.006 (1.60 ± 0.15)	0.031 ± 0.006 (0.80 ± 0.15)	0.031 ± 0.006 (0.80 ± 0.15)	0.014 ± 0.006 (0.36 ± 0.15)
0805	2012	0.079 ± 0.008 (2.00 ± 0.20)	0.049 ± 0.008 (1.25 ± 0.20)	0.035 ± 0.008 (0.90 ± 0.20)	0.020 ± 0.010 (0.51 ± 0.25)
1206	3216	0.126 ± 0.008 (3.20 ± 0.20)	0.063 ± 0.008 (1.60 ± 0.20)	0.043 ± 0.008 (1.10 ± 0.20)	0.020 ± 0.010 (0.51 ± 0.25)
1806	4516	0.177 ± 0.010 (4.50 ± 0.25)	0.063 ± 0.008 (1.60 ± 0.20)	0.055 ± 0.010 (1.40 ± 0.25)	0.020 ± 0.010 (0.51 ± 0.25)
1812	4532	0.177 ± 0.010 (4.50 ± 0.25)	0.126 ± 0.010 (3.20 ± 0.25)	0.055 ± 0.010 (1.40 ± 0.25)	0.020 ± 0.010 (0.51 ± 0.25)

Dimensions in inches (mm)

Electrical Characteristics

Standard FPB-0603 and FPB-0805 Sizes

Part Number	Impedance Ω at 100 MHz	Max. DCR Ω	Max. Current mA
FPB-0603-A300P*	30	0.06	1,000
FPB-0603-A600P*	60	0.10	500
FPB-0805-A070P*	7	0.02	3,000
FPB-0805-A100P*	10		
FPB-0805-A110P*	11		
FPB-0805-A150P*	15	0.025	3,000
FPB-0805-A300P*	30		
FPB-0805-A600P*	40	0.03	2,000
FPB-0805-A450P*	45		
FPB-0805-A800P*	80	0.10	1,000
FPB-0805-A201P*	200	0.15	1,000
FPB-0805-A301P*	300		
FPB-0805-A601P*	600	0.20	1,000

Notes: * Please add packaging code at the end of part.
To change Tolerance Code, replace P with other tolerance values.
Consult factory for other impedance values of the 0603 and 0805 footprint that are available from Spectrum Control.

Standard FPB-1206 Sizes

Part Number	Impedance Ω at 100 MHz	Max. DCR Ω	Max. Current mA
FPB-1206-A190P*	19		
FPB-1206-A260P*	26	0.02	3,000
FPB-1206-A300P*	30		
FPB-1206-A310P*	31		
FPB-1206-A500P*	50	0.025	3,000
FPB-1206-A700P*	70	0.03	2,000
FPB-1206-A800P*	80		
FPB-1206-A900P*	90	0.10	1,000
FPB-1206-A121P*	120		
FPB-1206-A601P*	600	0.20	1,000
FPB-1206-E101P*	100	0.03	3,000
FPB-1206-E121P*	120	0.04	
FPB-1206-E601P*	600	0.10	1,500

Notes: * Please add packaging code at the end of part.
To change Tolerance Code, replace P with other tolerance values.
Consult factory for other impedance values of the 1206 footprint that are available from Spectrum Control.

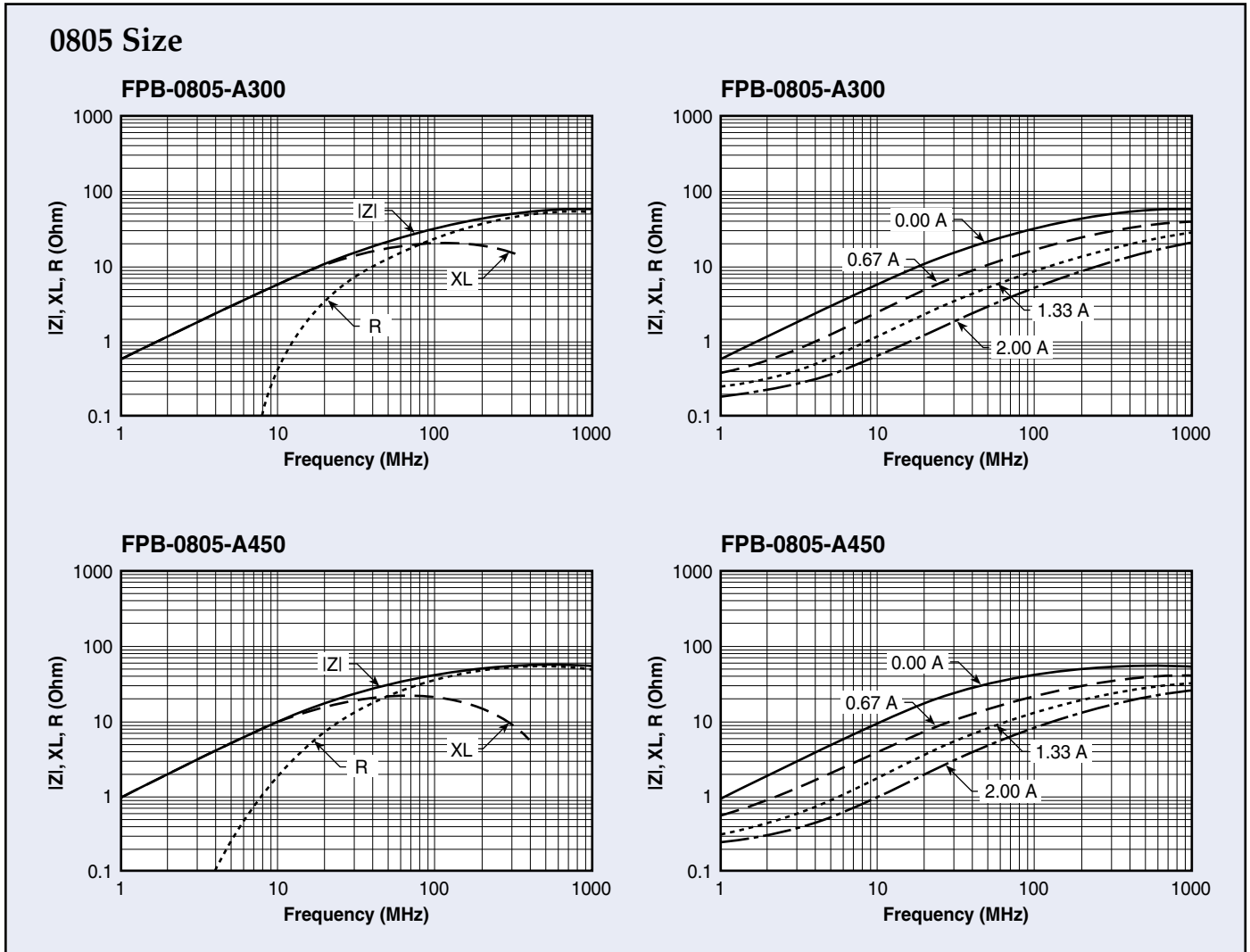
Standard FPB-1806 and FPB-1812 Sizes

Part Number	Impedance Ω at 100 MHz	Max. DCR Ω	Max. Current mA
FPB-1806-B600P*	60	0.01	6,000
FPB-1806-B750P*	75	0.03	4,000
FPB-1806-B800P*	80	0.03	4,000
FPB-1806-B151P*	150	0.07	2,000
FPB-1812-A700P*	70	0.03	6,000
FPB-1812-B121P*	120	0.05	3,000

Notes: * Please add packaging code at the end of part.
To change Tolerance Code, replace P with other tolerance values.
Consult factory for other impedance values of the 1806 and 1812 footprint that are available from Spectrum Control.

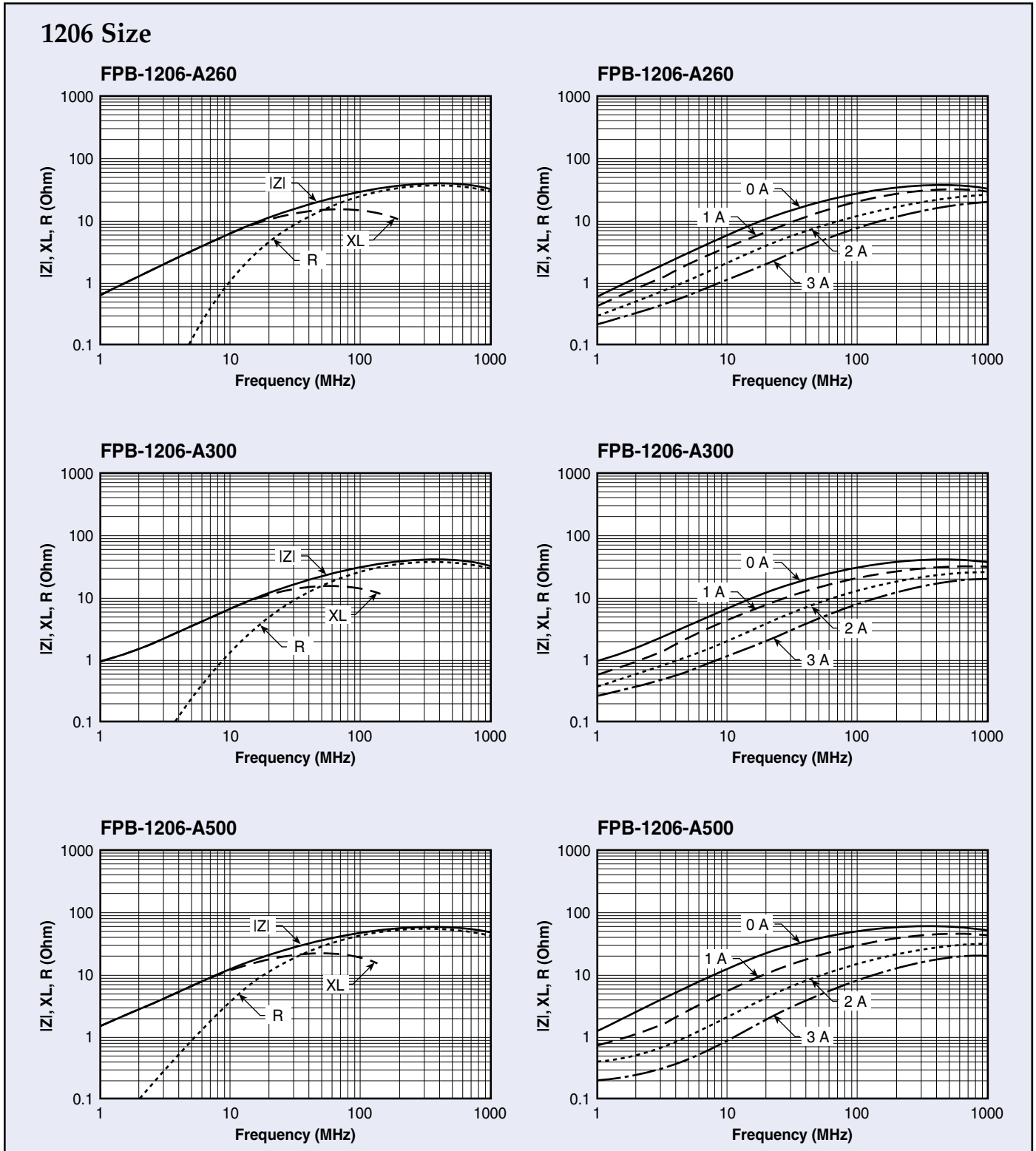
Surface Mount High Current EMI Filters Ferrite Power Beads

Typical Impedance Characteristics (Curves not listed are available upon request or at our website.)



Surface Mount High Current EMI Filters Ferrite Power Beads

Typical Impedance Characteristics (Curves not listed are available upon request or at our website.)

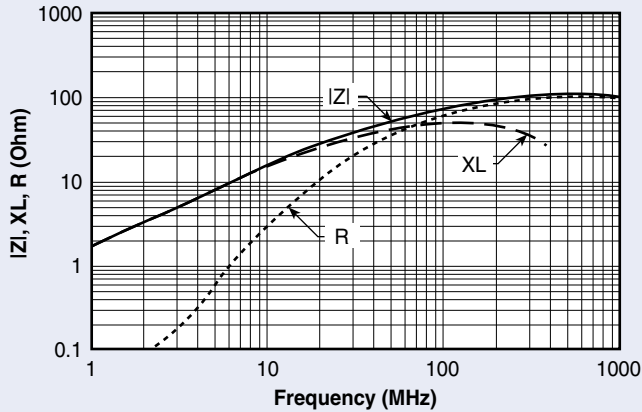


Surface Mount High Current EMI Filters Ferrite Power Beads

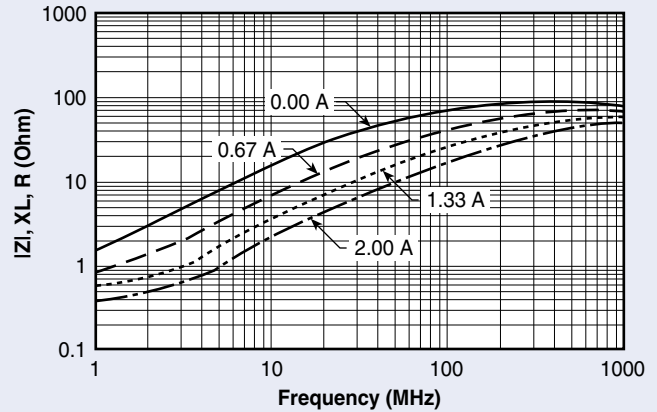
Typical Impedance Characteristics (Curves not listed are available upon request or at our website.)

1206 Size *continued*

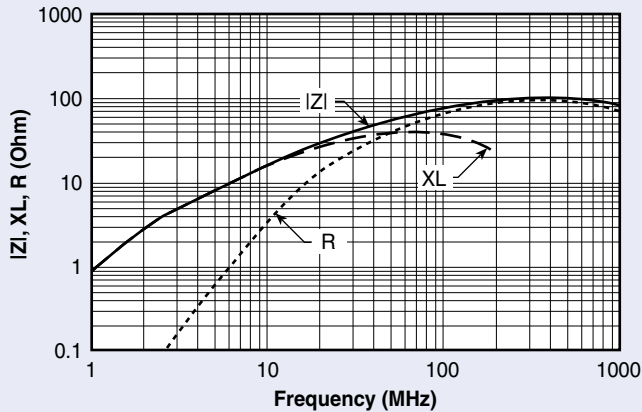
FPB-1206-A700



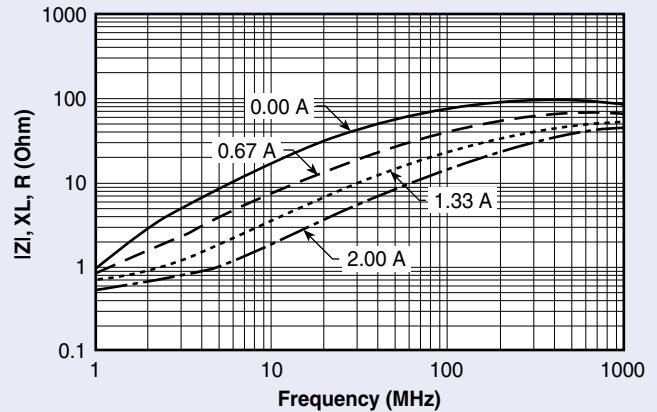
FPB-1206-A700



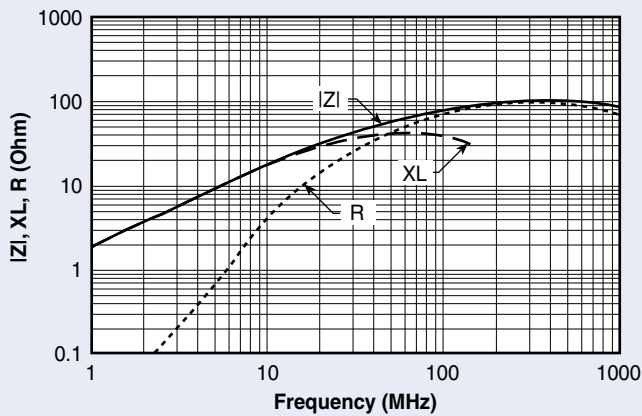
FPB-1206-A800



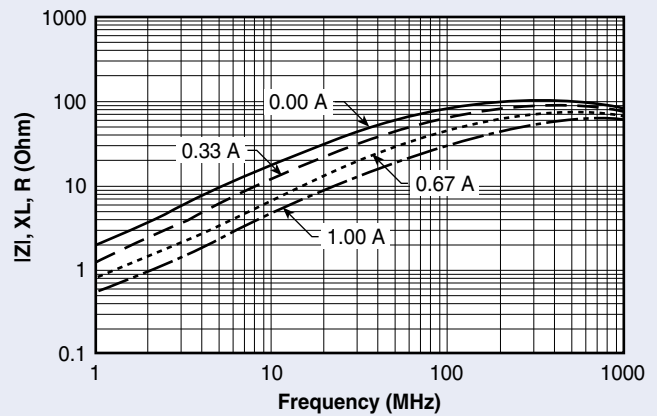
FPB-1206-A800



FPB-1206-A900



FPB-1206-A900



Surface Mount High Current EMI Filters Ferrite Power Beads

Typical Impedance Characteristics (Curves not listed are available upon request or at our website.)

