



Frontier Electronics Corp.

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Multi-Layer Chip Beads--- Standard FB series

A. Electrical Specifications:

Part Number	Impedance (OHM) @100 MHz	DCR (OHM) Max.	I (mA) max.
FB160808U090	9 ± 25%	0.20	500
FB160808U300	30 ± 25%	0.20	400
FB160808B050	5 ± 25%	0.20	600
FB201209Z100	10 ± 25%	0.15	600
FB201209U110	11 ± 25%	0.15	600
FB201209U320	32 ± 25%	0.15	400
FB201209B070	7 ± 25%	0.15	600
FB321611Z260	26 ± 25%	0.20	500
FB321611U310	31 ± 25%	0.20	500
FB321611U600	60 ± 25%	0.30	400
FB321611U900	90 ± 25%	0.30	300
FB321611B190	19 ± 25%	0.20	500
FB321616U600	60 ± 25%	0.30	400
FB322513Z520	52 ± 25%	0.30	400
FB322513U600	60 ± 25%	0.30	400
FB322513U900	90 ± 25%	0.30	300
FB451616Z800	80 ± 25%	0.10	500
FB451616U600	60 ± 25%	0.10	500
FB453215Z121	120 ± 25%	0.30	300
FB453215U131	130 ± 25%	0.30	300
FB453215B700	70 ± 25%	0.30	300

B. Materials:

ITEM	UNIT	Material Code			
		B	G	U	Z
Initial Permeability (μ_{iac}):	----	45	110	200	500
Maximum Permeability (μ_m):	----	125	250	450	900
Saturation Flux Density at 10 Oe (Bs):	Gauss	2000	1700	1400	1500
Curie Temperature (Tc):	°C	>200	>130	>130	>100
Volume Resistivity (ρ):	Ω -m	100000	100000	100000	100000
Temperature Coefficient:	1/10000°C	10	13	12	5
Density:	g/cm ³	4.8	4.8	4.8	4.8



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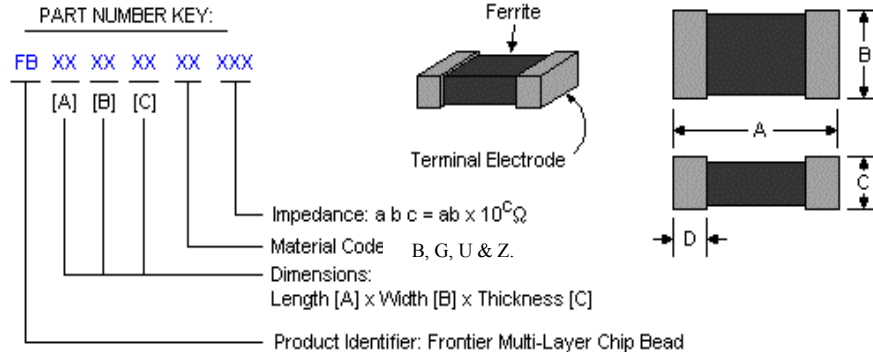
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C. Dimensions: [Unit: mm /(inch)]

Package Size	A	B	C	D
160808 (0603)	1.6 ± 0.2 (0.063 ± 0.008)	0.8 ± 0.2 (0.031 ± 0.008)	0.8 ± 0.2 (0.031 ± 0.008)	0.5 ± 0.3 (0.020 ± 0.012)
201209 (0805)	2.0 ± 0.2 (0.079 ± 0.008)	1.2 ± 0.2 (0.047 ± 0.008)	0.9 ± 0.2 (0.035 ± 0.008)	0.5 ± 0.3 (0.020 ± 0.012)
321611 (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)
321616 (1206)	3.2 ± 0.2 (0.126 ± 0.008)	1.6 ± .02 (0.063 ± 0.008)	1.6 ± 0.2 (0.063 ± 0.008)	0.5 ± 0.3 (0.020 ± 0.012)
322513 (1206)	3.2 ± 0.2 (0.126 ± 0.008)	2.5 ± .02 (0.098 ± 0.008)	1.3 ± 0.2 (0.035 ± 0.008)	0.5 ± 0.3 (0.020 ± 0.012)
451616 (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)
453215 (1812)	4.5 ± 0.2 (0.177 ± 0.008)	3.2 ± 0.2 (0.126 ± 0.008)	1.5 ± 0.2 (0.059 ± 0.008)	0.5 ± 0.3 (0.020 ± 0.012)

D. Part Number Key & Mechanical drawing:



FB: for Standard and high impedance series.

TI: for high current series.

FC: for GHz range noise suppression series.

E. Features:

1. High-density packaging with a pitch of 2.54 mm (0.1 Inch) max. is possible. This series require less space and have greater EMI suppression effects.
2. Excellent in physical properties, such as terminal strength, flexure strength, soldering resistance and solderability.
3. Applicable to both flow and IR reflow soldering.
4. High impedance covers wide frequency ranges.
5. TI series can be used in high current circuits due to its low DC resistance.
6. The products have four types of material: Material B, G, U & Z. Different types with the same shape are available.
7. Above part numbers on the table is for "LEADED" parts; for **RoHS** parts, please add "-LFR" at the end of our Part number.