



# FB321611 (1206) Series – SMD MULTILAYER FERRITE CHIP BEADS (HIGH IMPEDANCE)

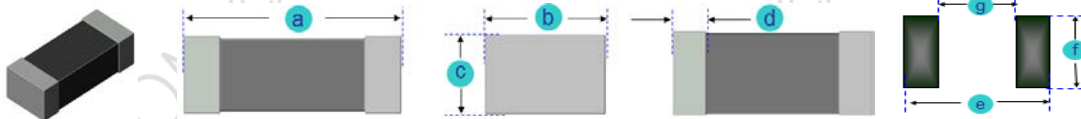
Rev. A

## A. Electrical Specifications:

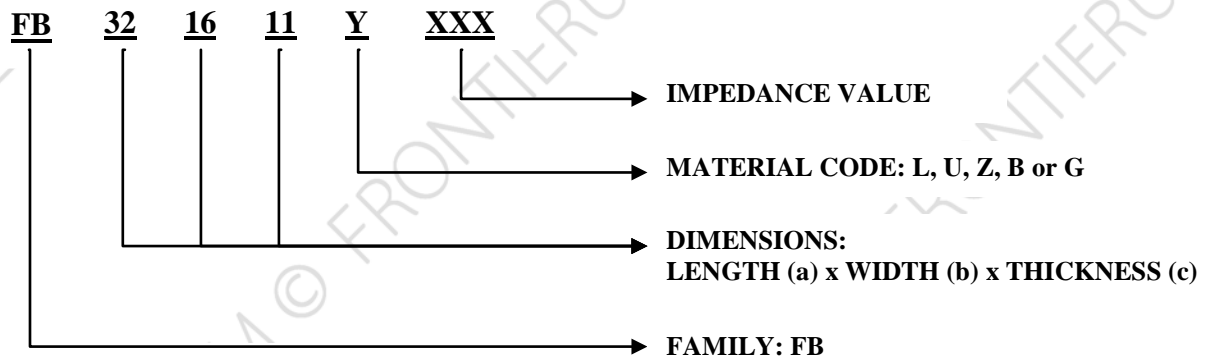
P/N	Impedance ( $\Omega$ ) $\pm 25\%$ @100MHz	DCR Max. ( $\Omega$ )	I rms. Max. (mA)
FB321611Z260	26	0.10	500
FB321611Z310	31	0.10	500
FB321611Z600	60	0.15	400
FB321611Z800	80	0.10	600
FB321611Z121	120	0.15	500
FB321611Z221	220	0.20	400
FB321611Z301	300	0.25	400
FB321611Z601	600	0.30	300
FB321611Z102	1000	0.45	200
FB321611Z122	1200 (at 50 MHz)	0.50	200
FB321611Z202	2000 (at 30 MHz)	0.60	200
FB321611U260	26	0.10	600
FB321611U310	31	0.10	600
FB321611U500	50	0.10	600
FB321611U700	70	0.15	800
FB321611U800	80	0.15	800
FB321611U121	120	0.20	500
FB321611U221	220	0.25	500
FB321611U301	300	0.15	800
FB321611U601	600	0.20	600
FB321611U102	1000	0.45	500
FB321611U122	1200 (at 50 MHz)	0.50	500
FB321611U152	1500 (at 50 MHz)	0.50	500
FB321611U202	2000 (at 30 MHz)	0.50	500
FB321611G070	7	0.15	500
FB321611G600	60	0.15	500
FB321611G800	80	0.15	500
FB321611G221	220	0.20	600
FB321611G301	300	0.25	500
FB321611G601	600	0.30	300
FB321611G102	1000	0.45	300
FB321611G152	1500	0.45	300
FB321611G202	2000	0.60	200
FB321611B190	19	0.10	600

## B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g
FB321611	3.2 (0.126)	1.6 (0.063)	1.1 (0.043)	0.5 (0.020)	4.40 (0.173)	1.80 (0.071)	1.20 (0.047)
Tol.	$\pm 0.2$ (0.008)	$\pm 0.2$ (0.008)	$\pm 0.2$ (0.008)	$\pm 0.3$ (0.012)	Typ.	Typ.	Typ.



## C. Part Number Key:





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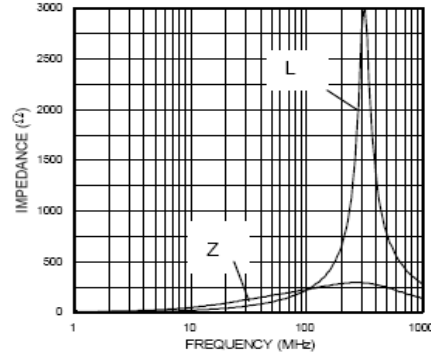
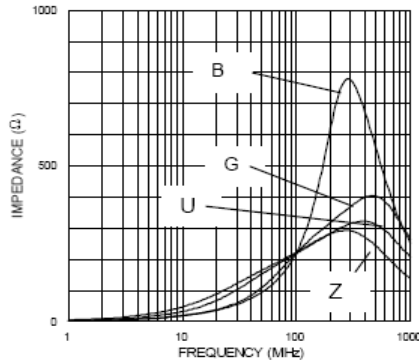
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## D. Materials:

ITEM	UNIT	Material Code				
		L	B	G	U	Z
Initial Permeability ( $\mu_{iac}$ ):	----	25	45	110	200	500
Maximum Permeability ( $\mu_m$ ):	----	125	125	250	450	900
Saturation Flux Density at 10 Oe:	Gauss	2000	2000	1700	1400	1500
Curie Temperature( $T_c$ ):	°C	>200	>200	>130	>100	>130
Volume Resistivity ( $\rho$ ):	$\Omega\text{-m}$	100000	100000	100000	100000	100000
Temperature Coefficient:	1/10000°C	10	10	13	5	12
Density:	g/cm <sup>3</sup>	4.8	4.8	4.8	4.8	4.8

## E. Impedance Characteristics of Materials:

- Z Material is for applications whose blocking regions are near 100 MHz.
- L Material, an improvement of B Material has sharp impedance characteristic at high frequency.
- G Material is for application whose signal frequency is far from the cut off region. Suitable for application requires low insertion loss at high frequency.
- Different materials are available for different application range.
- With one material, higher impedance has sharper characteristics.
- Please confirm the signal wave form to choose suitable products.



## F. General Information:

- FB321611-yxxx, "FB321611" = P/N, "y" = Material, "xxx" = Impedance.
- Tolerance:  $\pm 25\%$
- Small and lightweight surface mounting type.
- Dimensions are suitable for automatic mounting
- High-density packaging with a pitch of 2.54 mm (0.1 inch) max. is possible. This series requires less space and have greater EMI suppression effects.
- Different types with the same shape are available.
- Excellent in physical properties, such as terminal strength, flexure strength, soldering resistance and solder-ability.
- Applicable to both flow and IR reflow soldering.
- High impedance covers wide frequency ranges.
- TI series can be used in high current circuits due to its low DC resistance.
- Operating temperature:  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$
- Impedance and Current Range: From  $7\ \Omega$  (500 mA) to  $2000\ \Omega$  (200 mA)
- Unspecified values available on request.
- MSL: Level 1.

## G. Applications:

- Game Consoles
- Set Top Boxes
- Cables Modems
- Computers
- Mobile Communication Devices (Cell Phones, Radios, etc.)