

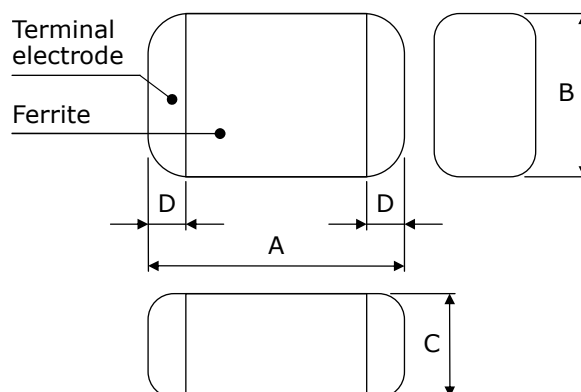
MULTILAYER CHIP BEADS

EFZ SERIES

■ FEATURES

- Monolithic inorganic material construction for high reliability; perfect shape for Automatic mounting, with no direction.
- Minimum floating capacity and excellent high frequency characteristics.
- Available in various sizes from 100505-321611 for wide range of application.
- Closed magnetic circuit avoids crosstalk, suitable for high density PCB.

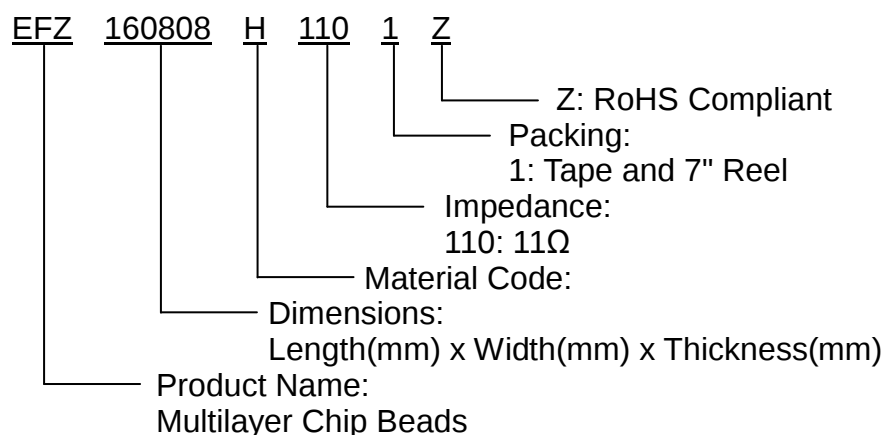
■ DIMENSIONS



UNIT: mm

Type	A	B	C	D
EFZ 100505(0402)	1.0±0.10	0.5±0.10	0.5±0.10	0.1~0.4
EFZ 160808(0603)	1.6±0.15	0.80±0.15	0.8±0.15	0.2~0.6
EFZ 201209(0805)	2.0±0.20	1.25±0.20	0.9±0.20	0.2~0.8
EFZ 321611(1206)	3.2±0.20	1.60±0.20	1.1±0.20	0.4~1.0

■ PART NUMBERING SYSTEM





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■ MATERIAL CHARACTERISTICS

L material: Standard type .For signal line application in which the blocking region is near100MHz. Impedance values selected for effectiveness at 10 to 300MHz.

H material: For applications calling for low insertion loss at low frequencies and sharply Increasing impedance at high frequency. Designed for high impedance at highfrequency for high speed signal line applications.

K material: High frequency range type intended for the 100MHz region and above. For signal line applications in which the signal frequency is far from the cutoff frequency. Impedance values selected for effectiveness at 40 to 400MHz.

G material: Designed as a noise countermeasure for the 200MHz~1GHz range where the rise of the Zcomponent is in the high frequency area.

Effective Range of Noise Suppression				Application
1MHz	10MHz	100MHz	1GHz	
EFZ-L				General Signal Line (I/O Port)
EFZ-H				High Speed Signal Line (LCD panel, Clock Signal, RAM Bus)
EFZ-K				General Signal Line (I/O Port) Frequency higher than L material
EFZ-G				Ultra High Speed Signal Line (>100MHz)



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■ ELECTRICAL CHARACTERISTICS

◆ TYPE: EFZ 100505

Part No.	Test Frequency (MHz)	Impedance (Ω) $\pm 25\%$	DC Resistance (Ω)Max.	Rating Current (mA)Max.
EFZ100505L100	100	10	0.05	500
EFZ100505L300	100	30	0.20	300
EFZ100505L600	100	60	0.40	200
EFZ100505L700	100	70	0.40	200
EFZ100505L800	100	80	0.40	200
EFZ100505L101	100	100	0.45	200
EFZ100505L121	100	120	0.50	200
EFZ100505L151	100	150	0.60	200
EFZ100505L181	100	180	0.65	100
EFZ100505L221	100	220	0.70	100
EFZ100505L301	100	300	0.75	100
EFZ100505L331	100	330	0.75	100
EFZ100505L471	100	470	0.90	100
EFZ100505L501	100	500	1.00	100
EFZ100505L601	100	600	1.10	50
EFZ100505L102	100	1000	1.50	50
EFZ100505H300	100	30	0.20	300
EFZ100505H600	100	60	0.40	200
EFZ100505H101	100	100	0.50	200
EFZ100505H121	100	120	0.50	200
EFZ100505H221	100	220	0.80	100
EFZ100505H301	100	300	0.85	100
EFZ100505H471	100	470	1.00	100
EFZ100505H601	100	600	1.50	50
EFZ100505K300	100	30	0.20	300
EFZ100505K600	100	60	0.40	200
EFZ100505K101	100	100	0.50	200
EFZ100505K121	100	120	0.50	200
EFZ100505K221	100	220	0.80	100
EFZ100505K301	100	300	0.85	100
EFZ100505K471	100	470	1.00	100
EFZ100505K601	100	600	1.50	50
EFZ100505G100	100	10	0.10	500
EFZ100505G300	100	30	0.20	300
EFZ100505G600	100	60	0.40	300
EFZ100505G101	100	100	0.55	300
EFZ100505G121	100	120	0.55	300
EFZ100505G221	100	220	0.80	200
EFZ100505G301	100	300	1.00	100
EFZ100505G471	100	470	1.50	50
EFZ100505G601	100	600	2.50	50



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◆ TYPE: EFZ 160808

Part No.	Test Frequency (MHz)	Impedance (Ω) $\pm$ 25%	DC Resistance (Ω)Max.	Rating Current (mA)Max.
EFZ160808L190	100	19	0.10	400
EFZ160808L310	100	31	0.10	400
EFZ160808L520	100	52	0.15	400
EFZ160808L600	100	60	0.15	400
EFZ160808L800	100	80	0.15	400
EFZ160808L101	100	100	0.15	400
EFZ160808L121	100	120	0.15	400
EFZ160808L151	100	150	0.15	400
EFZ160808L181	100	180	0.20	400
EFZ160808L201	100	200	0.20	400
EFZ160808L221	100	220	0.20	400
EFZ160808L301	100	300	0.30	400
EFZ160808L401	100	400	0.30	400
EFZ160808L451	100	450	0.30	400
EFZ160808L601	100	600	0.35	400
EFZ160808L751	100	750	0.35	400
EFZ160808L102	100	1000	0.55	300
EFZ160808L152	100	1500	0.60	200
EFZ160808H050	100	5	0.08	700
EFZ160808H300	100	30	0.20	500
EFZ160808H600	100	60	0.25	450
EFZ160808H101	100	100	0.30	450
EFZ160808H121	100	120	0.30	450
EFZ160808H151	100	150	0.35	450
EFZ160808H221	100	220	0.35	450
EFZ160808H301	100	300	0.35	450
EFZ160808H471	100	470	0.35	450
EFZ160808H601	100	600	0.40	450
EFZ160808H102	100	1000	0.60	300
EFZ160808K471	100	470	0.55	200
EFZ160808K601	100	600	0.65	200
EFZ160808K751	100	750	0.70	200
EFZ160808K102	100	1000	0.85	100
EFZ160808K152	100	1500	0.90	100
EFZ160808K202	100	2000	1.00	100
EFZ160808K252	100	2500	1.00	50
EFZ160808G070	100	7	0.10	900
EFZ160808G100	100	10	0.10	900
EFZ160808G680	100	68	0.10	700
EFZ160808G121	100	120	0.30	300
EFZ160808G301	100	300	0.35	300
EFZ160808G601	100	600	0.65	300
EFZ160808G102	100	1000	1.10	50



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◆ TYPE: EFZ 201209

Part No.	Test Frequency (MHz)	Impedance (Ω) $\pm$ 25%	DC Resistance (Ω)Max.	Rating Current (mA)Max.
EFZ201209L110	100	11	0.10	300
EFZ201209L170	100	17	0.10	300
EFZ201209L260	100	26	0.10	300
EFZ201209L310	100	31	0.10	300
EFZ201209L520	100	52	0.15	300
EFZ201209L600	100	60	0.15	300
EFZ201209L800	100	80	0.15	300
EFZ201209L101	100	100	0.20	300
EFZ201209L121	100	120	0.20	300
EFZ201209L151	100	150	0.20	300
EFZ201209L221	100	220	0.25	300
EFZ201209L301	100	300	0.25	300
EFZ201209L401	100	400	0.30	300
EFZ201209L531	100	530	0.35	300
EFZ201209L601	100	600	0.35	300
EFZ201209L102	100	1000	0.45	300
EFZ201209L152	100	1500	0.70	300
EFZ201209H050	100	5	0.07	500
EFZ201209H300	100	30	0.15	300
EFZ201209H600	100	60	0.15	300
EFZ201209H750	100	75	0.20	300
EFZ201209H101	100	100	0.20	300
EFZ201209H121	100	120	0.20	300
EFZ201209H221	100	220	0.25	200
EFZ201209H301	100	300	0.25	200
EFZ201209H601	100	600	0.25	200
EFZ201209H751	100	750	0.30	200
EFZ201209H102	100	1000	0.30	200
EFZ201209H152	100	1500	0.35	200
EFZ201209H182	100	1800	0.40	200
EFZ201209H202	100	2000	0.40	200
EFZ201209H222	100	2200	0.50	200
EFZ201209H252	100	2500	0.60	200
EFZ201209H272	100	2700	0.60	200
EFZ201209K800	100	80	0.30	300
EFZ201209K601	100	600	0.35	200
EFZ201209K751	100	750	0.35	200
EFZ201209K102	100	1000	0.40	200
EFZ201209K122	100	1200	0.40	200
EFZ201209K152	100	1500	0.45	200
EFZ201209K202	100	2000	0.60	200
EFZ201209G050	100	5	0.07	500
EFZ201209G070	100	7	0.07	500
EFZ201209G121	100	120	0.35	300
EFZ201209G601	100	600	0.65	200



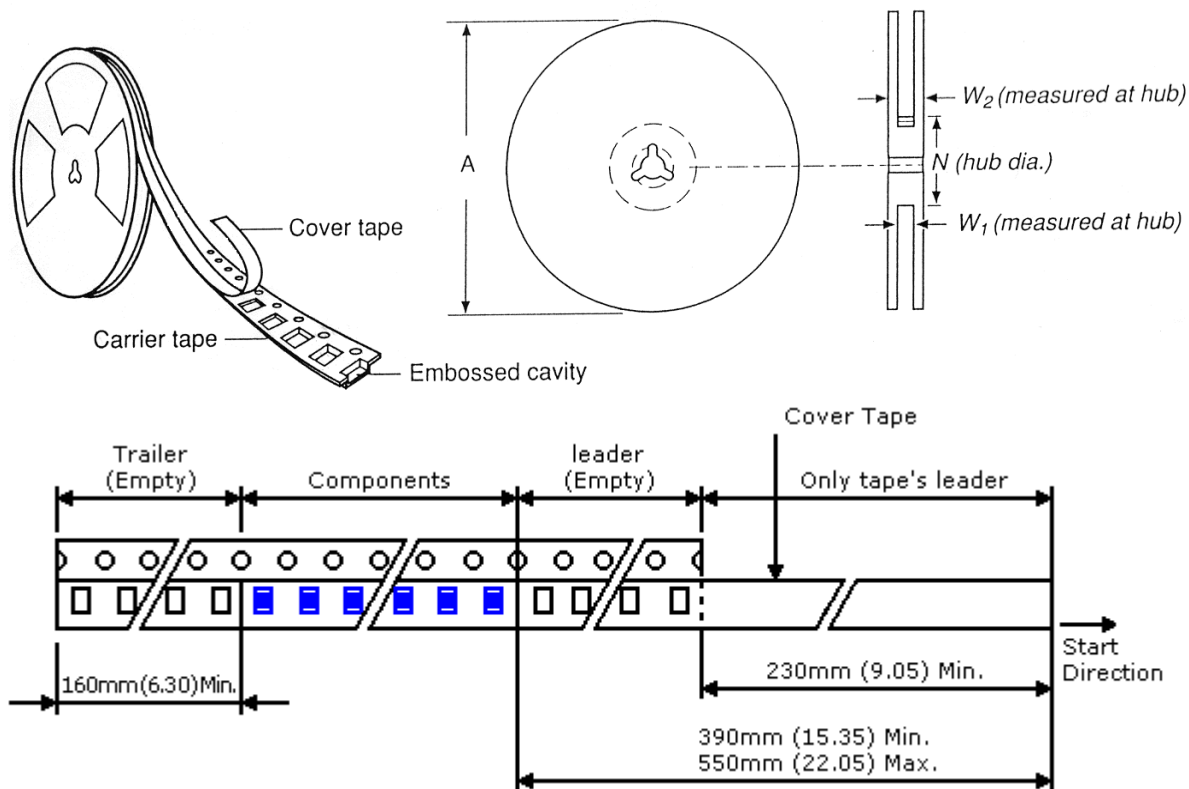
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◆ TYPE: EFZ 321611

Part No.	Test Frequency (MHz)	Impedance (Ω) $\pm 25\%$	DC Resistance (Ω)Max.	Rating Current (mA)Max.
EFZ321611L190	100	19	0.10	800
EFZ321611L260	100	26	0.10	800
EFZ321611L310	100	31	0.10	800
EFZ321611L520	100	52	0.15	800
EFZ321611L600	100	60	0.15	500
EFZ321611L700	100	70	0.15	500
EFZ321611L101	100	100	0.20	450
EFZ321611L121	100	120	0.20	450
EFZ321611L151	100	150	0.20	450
EFZ321611L221	100	220	0.20	350
EFZ321611L301	100	300	0.20	350
EFZ321611L401	100	400	0.25	350
EFZ321611L601	100	600	0.25	350
EFZ321611L751	100	750	0.30	350
EFZ321611L102	100	1000	0.35	350
EFZ321611L152	100	1500	0.40	350
EFZ321611L182	100	1800	0.40	350
EFZ321611H190	100	19	0.10	500
EFZ321611H310	100	31	0.15	500
EFZ321611H600	100	60	0.20	500
EFZ321611H101	100	100	0.25	300
EFZ321611H121	100	120	0.25	300
EFZ321611H201	100	200	0.25	300
EFZ321611H301	100	300	0.30	300
EFZ321611H601	100	600	0.35	300
EFZ321611H751	100	750	0.35	300
EFZ321611H102	100	1000	0.40	200
EFZ321611H152	100	1500	0.45	200
EFZ321611H202	100	2000	0.45	200
EFZ321611K601	100	600	0.50	200
EFZ321611K102	100	1000	0.70	200
EFZ321611K122	100	1200	0.70	200
EFZ321611G050	100	5	0.07	500
EFZ321611G070	100	7	0.07	500
EFZ321611G301	100	300	0.30	300
EFZ321611G601	100	600	0.45	300

TAPE & REEL PACKAGING

■ Packaging - Cover Tape



Reel Dimensions		
Reel type	W=8mm	W=12mm
A	Φ178mm	Φ178mm
N	Φ50mm min.	Φ50mm min.
W ₁	8.4+1.5mm	12.4+2.0mm
W ₂	14.4mm max.	18.4mm max.

■ Packaging Quantity

Type	Reel/Tape
100505	10000
160808	4000
201209	4000
201212	3000
321611	3000
321616	2000

Type	Reel/Tape
EWL2520	2000
EWL3225	2000
EWL4532	500
EWH0603	4000
EWH0805	2000
EWH1008	2000