Fair-Rite Products Corp.
Your Signal Solution®

Chip Beads (2504021007Y0)

RoHS Certificate of Compliance RoHS Material Declaration

Part Number: 2504021007Y0

MULTI- LAYER CHIP BEAD

Part Number System: Example 2512063017Y1

25	1206	301	7	Y	1
Chip Bead Code	Package Size Code	Impedance Code 300Ω	Packaging Code 6= Bulk Packed 7= Taped and Reeled 7" Reel 8= Taped and Reeled 13" Reel	Material Code Y = Standard Signal Speed Z = High Signal Speed H = GHz Speed	Current Code 0 < 1.0A 1 ≥ 1.0A < 2.0A 3 ≥ 3.0A < 4.0A ETC

Fair- Rite offers a broad selection of cost effective multi- layer chip beads to suppress conducted EMI signals. Chip beads can be used in an array of devices such as cellular phones, computers, laptops, pagers, etc. The small package sizes accommodate automated placements and allow for a dense packaging of circuit boards.

Chip Beads are available in standard, high and GHz signal speeds.

Packaging Options:
-□ All multi- layer chip beads are supplied taped and reeled, if required bulk packed chip beads can be provided.

The suggested land patterns are in accordance to the latest revision of IPC-7351.

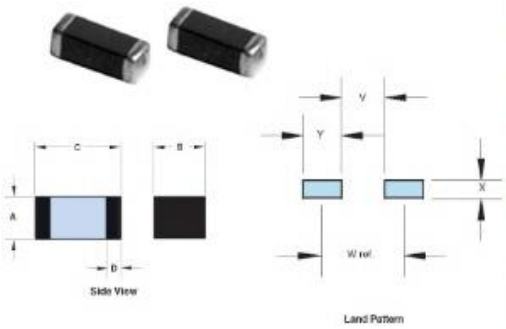
Weight: 0.002 (g)

Package Size: 0402 (1005)

Dim	mm	mm tol	nominal inch	inch misc.
A	0.5	±0.05	0.02	_
B	0.5	±0.05	0.02	_
C	1	±0.05	0.04	_
D	0.25	±0.15	0.01	_

Land Patterns				
V	W	X	Y	Z
0.40 (0.016”)	1.30 (0.051”)	0.70 (0.028”)	0.90 (0.035”)	–

Reel Information				
Tape Width mm	Pitch mm	Parts 7" Reel	Parts 13" Reel	Parts 14" Reel
8	4	10000	_	_



Pkg. Size	A	B	C	D	Wt. (g)	Land Patterns				Reel Information		
						V	W (ref)	X	Y	Tape Width mm	Pitch mm	Part 7" Reel
0402 (1005)	0.5±0.05 0.020	0.5±0.05 0.020	1.0±0.05 0.040	0.25±0.15 0.010	0.002	0.40 0.016	1.30 0.051	0.70 0.028	0.90 0.035	8	4	10000
0603 (1608)	0.8±0.15 0.031	0.8±0.15 0.031	1.6±0.15 0.063	0.4±0.2 0.016	0.006	0.60 0.024	1.70 0.067	1.00 0.039	1.10 0.043	8	4	4000
0805 (2012)	0.9±0.2 0.035	1.25±0.2 0.049	2.0±0.2 0.079	0.5±0.3 0.020	0.01	0.60 0.024	1.90 0.075	1.50 0.059	1.30 0.051	8	4	4000
1206 (3216)	1.1±0.2 0.043	1.6±0.2 0.063	3.2±0.2 0.126	0.7±0.3 0.028	0.03	1.20 0.047	2.80 0.110	1.80 0.071	1.60 0.063	8	4	3000
1806 (4516)	1.6±0.2 0.063	1.6±0.2 0.063	4.5±0.2 0.177	0.7±0.3 0.028	0.06	2.00 0.079	3.90 0.154	1.80 0.071	1.90 0.075	12	8	2000
1812 (4532)	1.5±0.2 0.059	3.2±0.2 0.126	4.5±0.2 0.177	0.7±0.3 0.028	0.09	2.00 0.079	3.90 0.154	3.40 0.134	1.90 0.075	12	8	1000

Chart Legend
+ Test frequency

Typical Impedance (Ω)	
50 MHz	8
100 MHz+	10 ±25%
500 MHz	13
1000 MHz+	-

Electrical Properties	
Max DCR (Ω)	0.05
Max Current (mA)	500

The impedance values listed are typical values. The nominal impedance with a +/- 25% tolerance is specified for the + marked 100 MHz. Chip beads are measured for impedance on the HP 4291A and fixture HP 16192A.
Chip beads are 100% tested for impedance and dc resistance.

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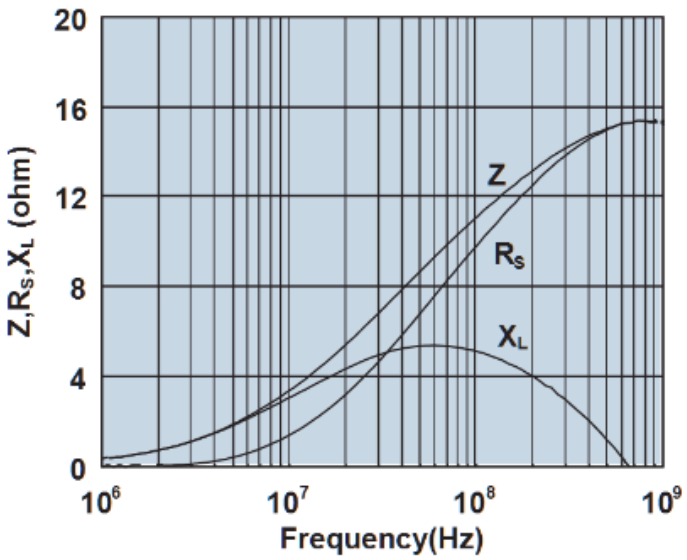
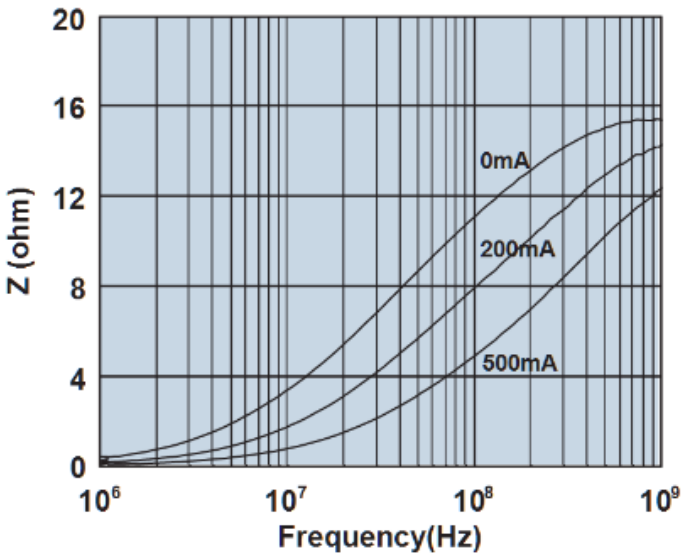


Impedance, reactance, and resistance vs. frequency.



Impedance vs. frequency with dc bias.