

# Chip Beads (2504021007Y0)



Part Number: 2504021007Y0

MULTI- LAYER CHIP BEAD

### Part Number System: Example 2512063017Y1

25	1206	301	7	Y	1
<b>Chip Bead Code</b>	<b>Package Size Code</b>	<b>Impedance Code</b> 300Ω	<b>Packaging Code</b> 6= Bulk Packed 7= Taped and Reeled 7" Reel 8= Taped and Reeled 13" Reel	<b>Material Code</b> Y = Standard Signal Speed Z = High Signal Speed H = GHz Speed	<b>Current Code</b> 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	—

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

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



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
<b>0402 (1005)</b>	0.5±0.05 0.020	0.5±0.05 0.020	1.0±0.05 0.040	0.25±0.15 0.010	<b>0.002</b>	0.40 0.016	1.30 0.051	0.70 0.028	0.90 0.035	8	4	1000
<b>0603 (1608)</b>	0.8±0.15 0.031	0.8±0.15 0.031	1.6±0.15 0.063	0.4±0.2 0.016	<b>0.006</b>	0.60 0.024	1.70 0.067	1.00 0.039	1.10 0.043	8	4	4000
<b>0805 (2012)</b>	0.9±0.2 0.035	1.25±0.2 0.049	2.0±0.2 0.079	0.5±0.3 0.020	<b>0.01</b>	0.60 0.024	1.90 0.075	1.50 0.059	1.30 0.051	8	4	4000
<b>1206 (3216)</b>	1.1±0.2 0.043	1.6±0.2 0.063	3.2±0.2 0.126	0.7±0.3 0.028	<b>0.03</b>	1.20 0.047	2.80 0.110	1.80 0.071	1.60 0.063	8	4	3000
<b>1806 (4516)</b>	1.6±0.2 0.063	1.6±0.2 0.063	4.5±0.2 0.177	0.7±0.3 0.028	<b>0.06</b>	2.00 0.079	3.90 0.154	1.80 0.071	1.90 0.075	12	8	2000
<b>1812 (4532)</b>	1.5±0.2 0.069	3.2±0.2 0.126	4.5±0.2 0.177	0.7±0.3 0.028	<b>0.09</b>	2.00 0.079	3.90 0.154	3.40 0.134	1.90 0.075	12	8	1000

### Chart Legend

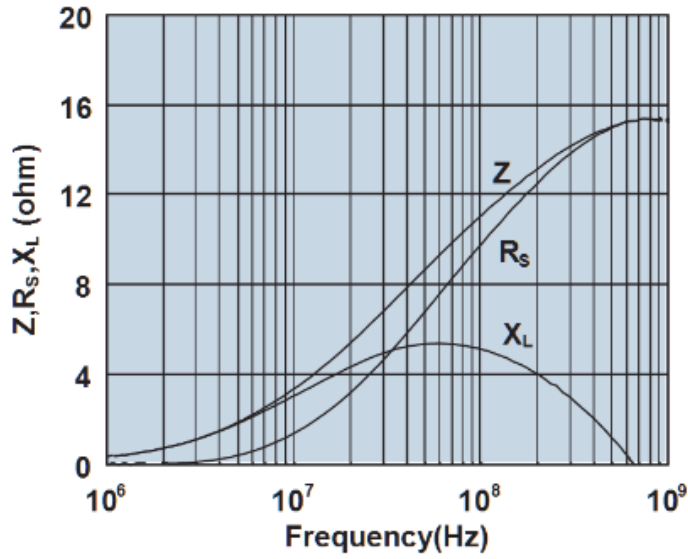
+ Test frequency

Typical Impedance ( $\Omega$ )	
50 MHz	8
100 MHz <sup>+</sup>	10 ±25%
500 MHz	13
1000 MHz <sup>+</sup>	-

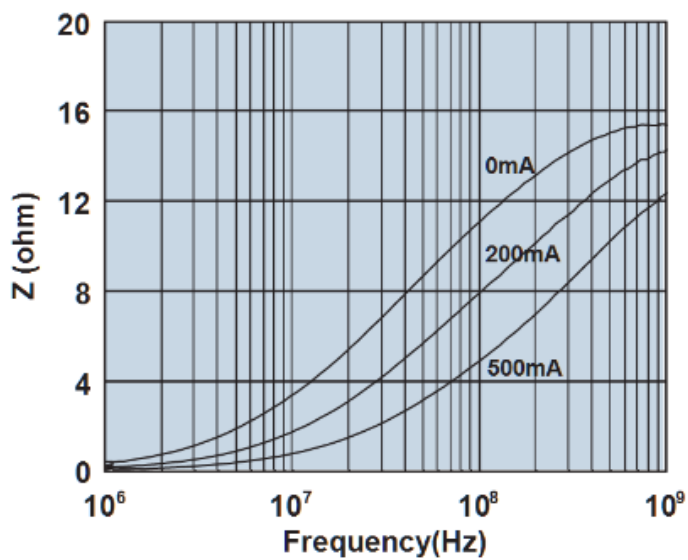
Electrical Properties	
Max DCR ( $\Omega$ )	0.05
Max Current (mA)	500

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.