Fair-Rite Products Corp.

Your Signal Solution®

# Chip Beads (2506033007Y0)



Part Number: 2506033007Y0

### MULTI- LAYER CHIP BEAD

## Part Number System: Example 2512063017Y1

25	5 1206 301		7	Y	1		
Chip	Package	Impedance	Packaging	Material	Current Code		
Bead	Bead Size Code		Code	Code	0 < 1.0A		
Code	Code	300 A	6= Bulk Packed	Y = Standard Signal Speed	1 ≥1.0A <2.0A	۹.	
		7=	Taped and Reeled 7" Reel	Z = High Signal Speed	$3 \ge 3.0A < 4.0A$	۹.	
		8=	Taped and Reeled 13" Reel	H = GHz Speed	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.

#### Recommended Soldering Profile

#### Packaging Options:

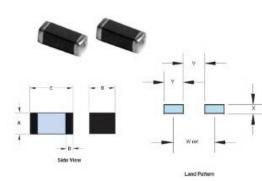
- All multi- layer chip beads are supplied taped and reeled, if required bulk packed chip beads can be provided.

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

Weight: 0.006 (g)

e Size	: 0603 (160)	8)		
mm	mm tol	nominal inch	inch misc	
0.8	±0.15	0.031	_	
0.8	±0.15	0.031		
1.6	±0.15	0.063		
0.4	±0.20	0.016	_	
atterns	5			
	W	Х	Y	Ζ
	1.70	1.00	1.10	
(0.024")		(0.039")	(0.043")	—
	mm 0.8 0.8 1.6 0.4	mm         mm tol $0.8$ $\pm 0.15$ $0.8$ $\pm 0.15$ $1.6$ $\pm 0.15$ $0.4$ $\pm 0.20$ atterns         W	mm         mm tol         nominal inch $0.8$ $\pm 0.15$ $0.031$ $0.8$ $\pm 0.15$ $0.031$ $1.6$ $\pm 0.15$ $0.063$ $0.4$ $\pm 0.20$ $0.016$ atterns           W         X $1.70$ $1.00$	mm         mm tol         nominal inch         inch misc $0.8$ $\pm 0.15$ $0.031$ $0.8$ $\pm 0.15$ $0.031$ $1.6$ $\pm 0.15$ $0.063$ $0.4$ $\pm 0.20$ $0.016$ atterns           W         X         Y $1.70$ $1.00$ $1.10$

Reel Informat	Information						
Tape Width mm	Pitch mm	Parts 7" Reel	Parts 13" Reel	Parts 14" Reel			
8	4	4000	10000	_			

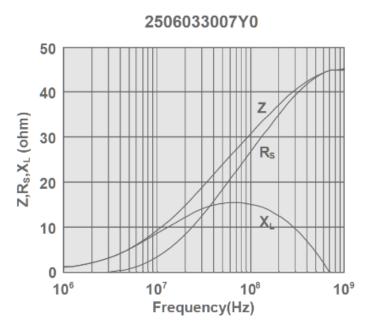


Pkg. Size	٨						Land P	atterns			Reel Int	ormation
		8	C	D	WL (g)	×	W (ref)	×	Y	Tape Width mm	Pitch	Part 7" Ree
0402 (1005)		0.5±0.05 0.020	1.0±0.05 0.040	0.25±0.15 0.010	0.002	0.40 0.016	1.30 0.051	0.70 0.028	0.90 0.035	8	4	1000
0603 (1608)	0.8±0.15 0.031	0.8±0.15 0.031	1.6±0.15 0.063	0.4±0.2 0.016	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

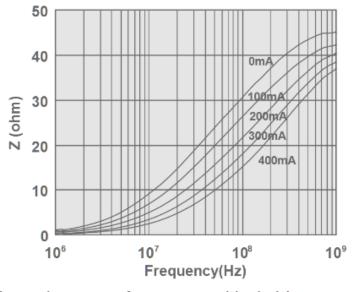
# **Chart Legend** + Test frequency

Typical Impedance (Ω)						
50 MHz	23					
$100 \text{ MHz}^+$	30 ±25%	<u>_</u>				
500 MHz	46					
$1000 \text{ MHz}^+$	-					
Electrical Provide the Provide	operties					
Max DCR (Ω)	0.1					
Max Current (mA)	400					

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.



Impedance, reactance, and resistance vs. frequency.



Impedance vs. frequency with dc bias.

	Fai	r- Rite Products C	orp.	One Commerci	ial Rov	w, Wallkill, New York 125	89-02	288
888-324-7748		845-895-2055		Fax: 845-895-2629		ferrites@fair- rite.com		www.fair- rite.com