Fair-Rite Products Corp.
Your Signal Solution®

Chip Beads (2518131018Y8)

Part Number: 2518131018Y8

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.

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.

EIA Size (Metric Size)	component dimensions *				Wt (g)	Land Patterns **				Tape Width (mm)	Pitch (mm)	Parts/ 7" Reel	Parts/ 13" Reel
	A	B	C	D		V	W(ref)	X	Y				
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	10000
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	10000
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	10000
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	10000
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	5000
1813 (4532)	2.3±0.25 0.091	3.2±0.25 0.126	4.5±0.25 0.177	0.7±0.3 0.028	0.14	2.00 0.079	3.90 0.154	3.40 0.134	1.90 0.075	12	8	-	2500
2218 (5650)	1.8±0.25 0.071	5.08±0.25 0.200	5.59±0.51 0.220	0.76±0.35 0.030	0.21	3.00 0.118	6.10 0.240	5.60 0.220	3.10 0.122	12	8	-	2000
2219 (5650)	1.97±0.25 0.071	5.08±0.25 0.200	5.59±0.51 0.220	0.76±0.35 0.030	0.23	3.00 0.118	6.10 0.240	5.60 0.220	3.10 0.122	12	8	-	2000
2220 (5650)	3.2±0.25 0.126	5.08±0.25 0.200	5.59±0.51 0.220	0.76±0.35 0.030	0.38	3.00 0.118	6.10 0.240	5.60 0.220	3.10 0.122	12	8	-	2000
3312 (8530)	2.28±0.2 0.090	3.05±0.2 0.120	8.5±0.2 0.335	1.09±0.4 0.043	0.25	6.00 0.236	9.50 0.374	3.40 0.134	3.60 0.142	16	8	-	2500

* Fair-Rite sizes "1813", "2218" and "2219" are non standard thicknesses (A dimension).

** For Land Patterns: Fair-Rite's B dimension corresponds to the Land Pattern X dimension

** For Land Patterns: Fair-Rite's C dimension corresponds to the Land Pattern W dimension

Alternate Packaging / Reel Sizes, when available, are special order.

Weight: 0.14 (g)

Package Size: 1813 (4532)

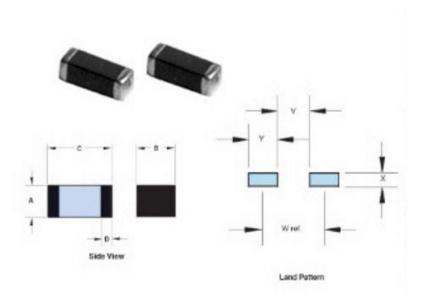| Dim	mm	mm tol	nominal inch	inch misc.
A	2.30	±0.25	0.091	_
B	3.2	±0.25	0.126	_
C	4.5	±0.25	0.177	_
D	0.7	±0.3	0.028	_

Reel Information				
Tape Width mm	Pitch mm	Parts 7" Reel	Parts 13" Reel	Parts 14" Reel
12	8	-	2500	_

Land Patterns				
V	W	X	Y	Z
2.00 (0.079")	3.90 (0.154")	3.40 (0.134")	1.90 (0.075")	_

Side View

Land Pattern

Typical Impedance (Ω)	
50 MHz	72
100 MHz$^+$	100 +/- 125%
500 MHz	147
1000 MHz$^+$	-

Electrical Properties	
Max DCR (Ω)	0.007
Max Current (mA)	8000

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.

PN 2518131018Y8

Z, Rs, XL - ohms

Graph: Z, Rs, XL (ohms) vs Frequency (Hz). Legend: Z (black solid), Rs (red dashed), XL (blue solid). Y-axis 0 to 160, X-axis 1,000,000 to 3,000,000,000.

PN 2518131018Y8 with DC Bias

Z - ohms

Graph: Z (ohms) vs Frequency (Hz) at DC bias levels 0A, 0.5A, 1A, 3A, 5A. Y-axis 0 to 160, X-axis 1,000,000 to 3,000,000,000.