Fair-Rite Products Corp.

Your Signal Solution®

Chip Beads (2506031027H0)



Part Number: 2506031027H0

MULTI- LAYER CHIP BEAD

Part Number System: Example 2512063017Y1

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

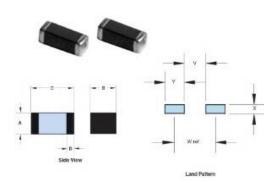
- All multi- layer chip beads are supplied taped and reeled, if required bulk packed chip beads can be provided.

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

Weight: 0.006 (g)

| Packag | e Size | : 0603 (1608 | 8) | | | | | | |
|---------------|--------|--------------|-----------|----------|---|--|--|--|--|
| Dim mm mm tol | | nominal inch | inch misc | • | | | | | |
| А | 0.8 | ±0.30 | 0.031 | | | | | | |
| В | 0.8 | ±0.15 | 0.031 | | | | | | |
| С | 1.6 | ±0.15 | 0.063 | _ | | | | | |
| D | 0.4 | ±0.20 | 0.016 | _ | | | | | |
| Land Patterns | | | | | | | | | |
| V | | W | Х | Y | Ζ | | | | |
| 0.60 | | 1.70 | 1.00 | 1.10 | | | | | |
| (0.024) | ") | (0.067") | (0.039") | (0.043") | — | | | | |

| Reel Information | | | | | | | | | |
|------------------|-------------|------------------|-------------------|-------------------|--|--|--|--|--|
| Tape Width mm | Pitch mm | Parts 7" Reel | Parts 13" Reel | Parts 14" Reel | | | | | |
| 8 | 4 | 4000 | 10000 | | | | | | |



| Pkg. Size | A | в | c | D | WL (g) | Land Patterns | | | Reel Informat | | | |
|----------------|-------------------|-------------------|-------------------|--------------------|-----------|---------------|---------------|---------------|---------------|---------------------|-------|-------------------|
| | | | | | | × | W (ref) | × | Y | Tape Width mm | Pitch | Part 7" Ree |
| 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 | 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 510 100 MHz ⁺ 1000 $\pm 25\%$ 500 MHz 1870 1000 MHz ⁺ 1600 Electrical Properties Max DCR 1 5 | | | | |
|---|----------------------|-------|----------|----|
| 100 MHz^+ $1000 \pm 25\%$ 500 MHz 1870 1000 MHz^+ 1600 Electrical Properties Max DCR 1 1 | Typical Imp | bedan | ce (| Ω) |
| 500 MHz 1870 1000 MHz⁺ 1600 Electrical Properties 15 Max DCR 15 | 50 MHz | 510 | | |
| 1000 MHz ⁺ 1600 Electrical Properties Max DCR | $100 \mathrm{MHz}^+$ | 1000 | ± 23 | 5% |
| Electrical Properties Max DCR 1.5 | 500 MHz | 1870 | | |
| Max DCR 1 5 | 1000 MHz^+ | 1600 | | |
| | Electrical P | roper | ties | |
| | Max DCR | | 1 5 | |
| (Ω) | (Ω) | 1.5 | | |
| Max Current 50 | | 50 | | |
| (mA) 50 | (mA) | | 50 | |

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.