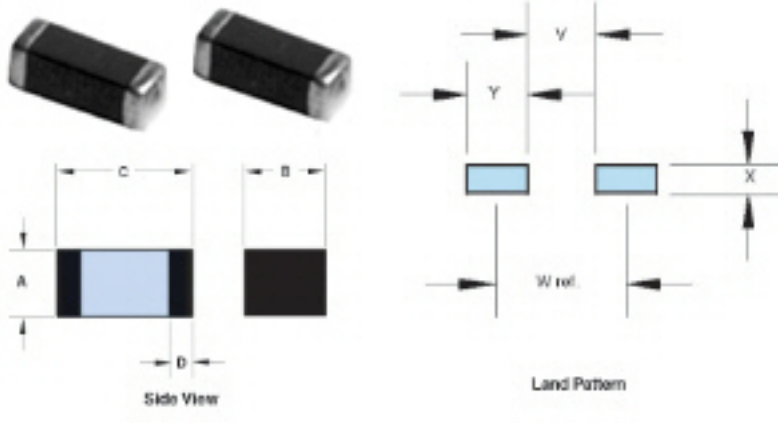
Fair-Rite Products Corp.
Your Signal Solution®
Ferrite Components for the Electronics Industry
Fair-Rite Products Corp. PO Box J,One Commercial Row, Wallkill, NY 12589-0288
Phone: (888) 324-7748 www.fair-rite.com

Fair-Rite Product's Catalog
Part Data Sheet, 2508051527Y0
Printed: 2010-11-09




| | |
|---|---|
| Part Number: | 2508051527Y0 |
| Frequency Range: | Low Current |
| Description: | MULTI-LAYER CHIP BEAD |
| Application: | Suppression Components |
| Where Used: | Board Component |
| Part Type: | Chip Beads |
| Preferred Part: | ✓ |

## Mechanical Specifications

Weight: .010 (g)

## Part Type Information

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 100% tested for impedance and dc resistance. They are available in standard, high and GHz signal speeds. The multi-layer chip beads are organized by increasing package size and current carrying capacity.

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

-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 have plated contacts, 100% tin over a nickel undercoating. They can accommodate both reflow and wave soldering technologies.

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

-Recommended storage and operating temperature range is -55°C to 125°C.

-Our 'Chip Bead Kit' (part number 0199000018) is available for prototype evaluation.

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## Mechanical Specifications

| Dim | mm | mm tol | nominal inch | inch misc. |
|---|---|---|---|---|
| A | 0.90 | ±0.20 | 0.035 | - |
| B | 1.25 | ±0.20 | 0.049 | - |
| C | 2.00 | ±0.20 | 0.079 | - |
| D | 0.50 | ±0.30 | 0.020 | - |
| E | - | - | - | - |
| F | - | - | - | - |
| G | - | - | - | - |
| H | - | - | - | - |
| J | - | - | - | - |
| K | - | - | - | - |

## Electrical Specifications

| Typical Impedance (Ω) | |
|---|---|
| 50 MHz | 989 |
| 100 MHz+ | 1500 ±25% |
| 500 MHz | 235 |
| 1000 MHz+ | - |

| Electrical Properties | |
|---|---|
| Signal Speed | Standard |
| Max DCR (Ω) | 0.70 |
| Max Current (mA) | 300 |

## Land Patterns

| V | W ref | X | Y | Z |
|---|---|---|---|---|
| 0.600<br>0.024 | 1.900<br>0.075 | 1.500<br>0.059 | 1.300<br>0.051 | -<br>- |

## Winding Information

| Turns Tested | Wire Size | 1st Wire Length | 2nd Wire Length |
|---|---|---|---|
| - | - | - | - |

## Reel Information

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

## Package Size

| Pkg Size |
|---|
| 0805<br>(2012) |

## Connector Plate

| # Holes | # Rows |
|---|---|
| - | - |

Legend
+ Test frequency
Preferred parts, the suggested choice for new designs,have shorter lead times and are more readily available.
The column H(Oe) gives for each bead the calculated dc bias field in oersted for 1 turn and 1 ampere direct current. The actual dc H field in the application is this value of H times the actual NI (ampere-turn) product. For the effect of the dc bias on the impedance of the bead material, see figures 18-23 in the application note How to choose Ferrite Components for EMI Suppression.
A ½ turn is defined as a single pass through a hole.

$\Sigma$l/A - Core Constant
$A_e$: Effective Cross-Sectional Area
$A_L$ - Inductance Factor $\left(\frac{L}{N^2}\right)$
N/AWG - Number of Turns/Wire Size for Test Coil
$l_e$: Effective Path Length
$V_e$: Effective Core Volume
NI - Value of dc Ampere-turns

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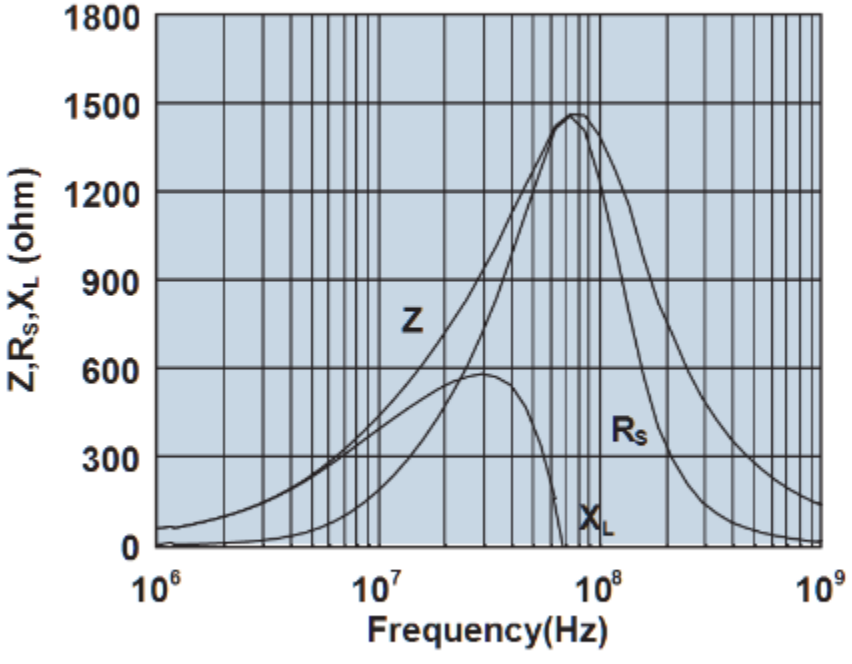
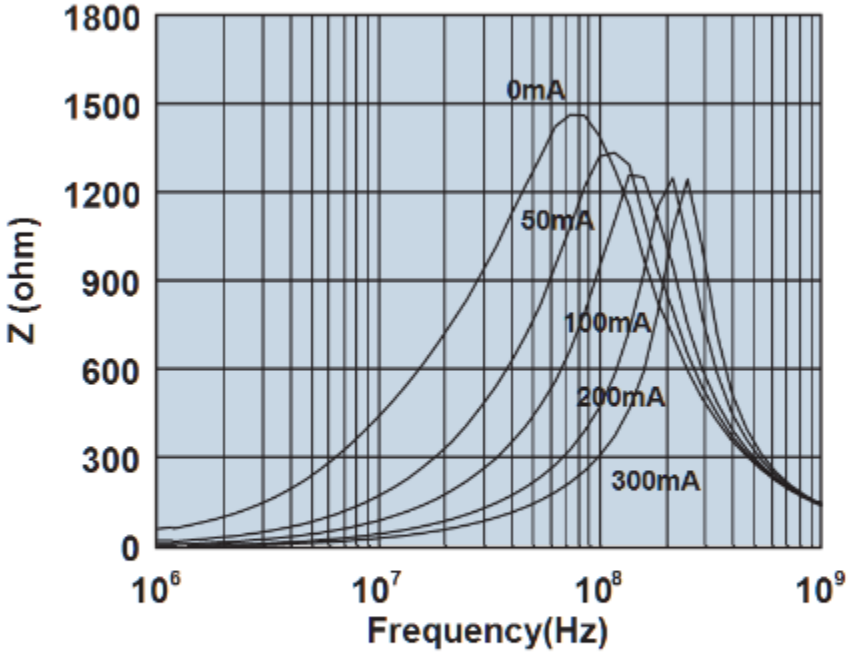



Impedance, reactance, and resistance vs. frequency.




Impedance vs. frequency with dc bias.

Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.

**Как с нами связаться**

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