

GMLB CHIPS

Multilayer Ferrite Chip Beads

◆ FEATURES

The GMLB Series is Mag.Layers' line of high quality ferrite chip beads. Using the latest in multilayer technology, we have developed chip beads that are able to resolve all EMI/EMC issues. High quality, reliability, and versatility make the GMLB series chip beads suitable for all your design needs.

- **High Reliability**

The monolithic inorganic materials used to construct GMLB chips restrain magnetic flux leakage thereby minimizing EMI concerns. GMLB chips are also extremely effective with unstable grounding.

- **Small Chip-Shaped Design**

The chip-shaped design makes GMLB chip beads ideal for automatic mounting.

- **High Soldering Heat Resistance**

High quality termination allows both flow and re-flow soldering methods to be applied.

- **Sharp High Frequency Characteristics**

The GMLB high frequency chip series has sharp impedance characteristics, which make it suitable for high-speed signal lines.

◆ CLASSIFICATIONS

Mag.Layers has developed seven chip series suitable for various EMC/EMI design applications.

1. **GMLB A-Series Chip Beads**

The A-series is designed for general-purpose applications. This series covers a wide range of impedance characteristics.

2. **GMLB B-Series Chip Beads**

The B-series is designed for high frequency applications. This series minimizes attenuation of the signal waveform due to its sharp impedance characteristics.

3. **GMLB P-Series Chip Beads**

The P-series is designed for high current applications. These chips are suitable for filtering noise of power lines and can match currents to a maximum of 6A DC.

4. **GMLB R-Series Chip Beads**

The R-series is designed for low frequency applications. These chips are able to generate higher impedances at lower frequencies.

5. **GMLB W-Series Chip Beads**

The W-series has a modified internal structure that minimizes the stray capacitance and generates high impedance in GHZ band.

6. **GMLB S-Series Chip Beads**

The S-series chip beads have lower DC resistance than P-series and are more effective for power saving.

7. **GMLB M-Series Chip Beads**

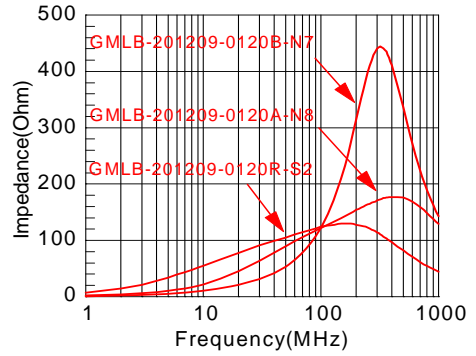
The M-series is designed for multi-line applications. The M-series arrays contain four beads in a single package and satisfy the requirements for high-density packaging of electric circuits.

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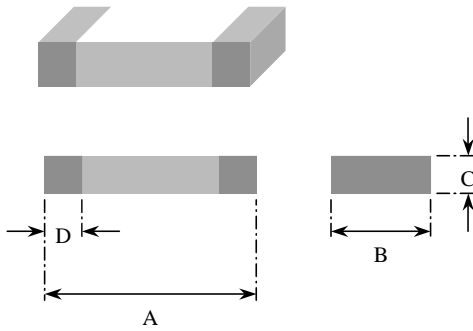
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◆ Typical electrical characteristic curves

Typical electrical characteristic curves for the GMLB R-series, A-series, and B-series chip beads. The B-series has sharp high frequency characteristics, while the A-series and R-series are effective over a wider frequency range.



◆ Product dimensions



◆ Product identification

❶	❷	❸	❹	❺
GMLB - 160808 - 0120 A - N8				
❶	Product Code			
❷	Dimensions (in mm)			
❸	Impedance (at 100 MHz)			
❹	Series Type			
❺	Design Code			

PRODUCT NO.	A	B	C	D
GMLB-201209 (0805)	2.0±0.20 (0.079±0.008)	1.2±0.20 (0.047±0.008)	0.9±0.20 (0.035±0.008)	0.5±0.30 (0.020±0.012)
GMLB-160808 (0603)	1.6±0.15 (0.063±0.006)	0.8±0.15 (0.031±0.006)	0.8±0.15 (0.031±0.006)	0.3±0.20 (0.012±0.008)
GMLB-160805 (0603)	1.6±0.15 (0.063±0.006)	0.8±0.15 (0.031±0.006)	0.5±0.15 (0.019±0.006)	0.3±0.20 (0.012±0.008)
GMLB-100505 (0402)	1.0±0.10 (0.039±0.004)	0.5±0.10 (0.019±0.004)	0.5±0.10 (0.019±0.004)	0.25±0.10 (0.0095±0.004)
GMLB-060303 (0201)	0.6±0.03 (0.024±0.001)	0.3±0.03 (0.012±0.001)	0.3±0.03 (0.012±0.001)	0.15±0.05 (0.006±0.002)

NOTE: Dimensions in mm (inch).