

SMD Multilayer Ferrite Chip Beads – GMLB-160808 NQ Series

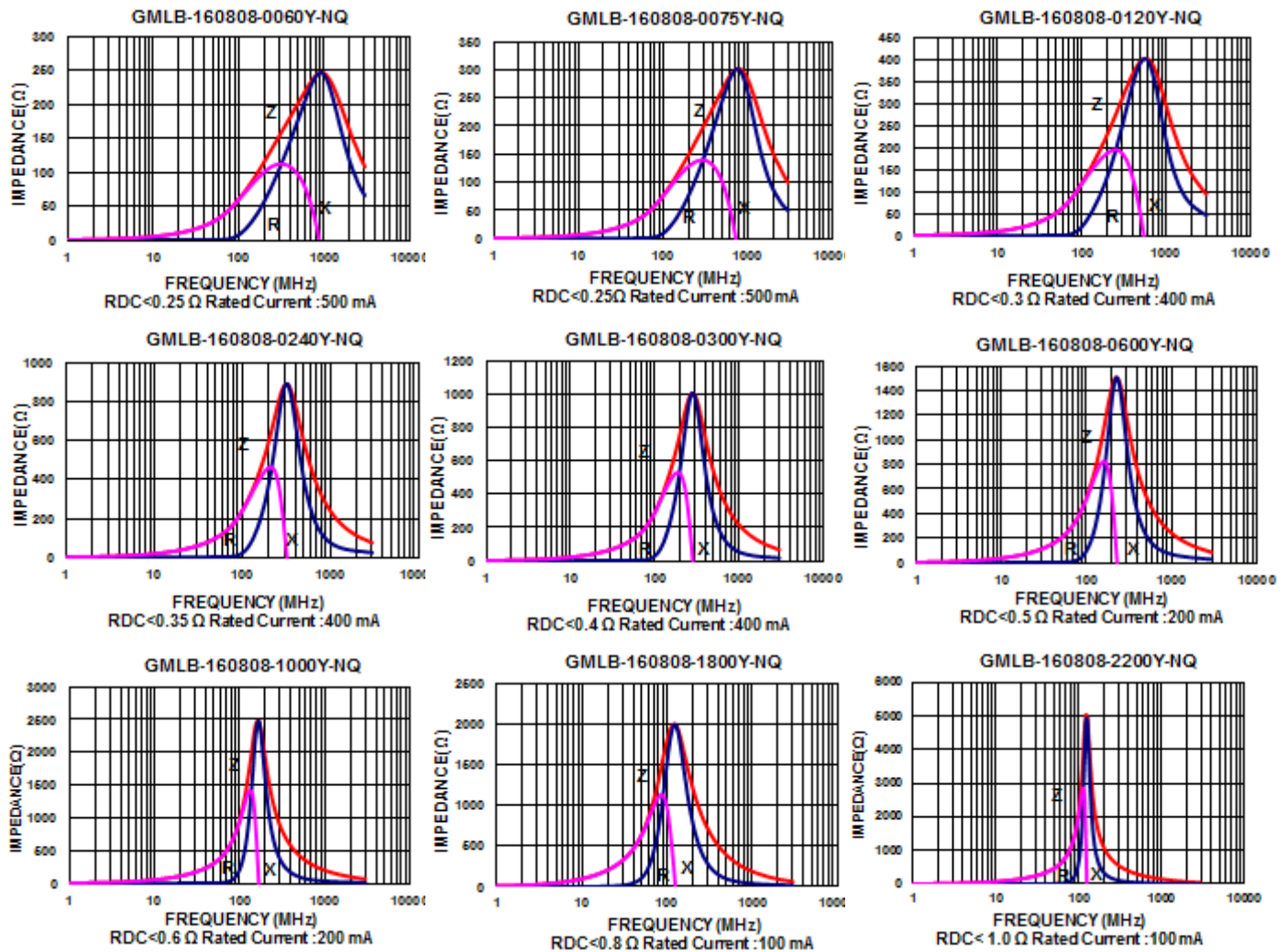
Electrical Characteristics

| Part Number | Impedance ($\Omega \pm 25\%$) | Test Frequency (MHz) | RDC (Ω) Max | Rated current (mA) Max |
|----------------------|------------------------------------|-------------------------|-------------------------|---------------------------|
| GMLB-160808-0060Y-NQ | 60 | 100 | 0.25 | 500 |
| GMLB-160808-0075Y-NQ | 75 | 100 | 0.25 | 500 |
| GMLB-160808-0120Y-NQ | 120 | 100 | 0.30 | 400 |
| GMLB-160808-0240Y-NQ | 240 | 100 | 0.35 | 400 |
| GMLB-160808-0300Y-NQ | 300 | 100 | 0.40 | 400 |
| GMLB-160808-0600Y-NQ | 600 | 100 | 0.50 | 200 |
| GMLB-160808-1000Y-NQ | 1000 | 100 | 0.60 | 200 |
| GMLB-160808-1800Y-NQ | 1800 | 100 | 0.80 | 100 |
| GMLB-160808-2200Y-NQ | 2200 | 100 | 1.0 | 100 |
| GMLB-160808-2500Y-NQ | 2500 | 100 | 1.0 | 100 |

Note: When ordering, please specify tolerance code. Tolerance : Y= $\pm 25\%$

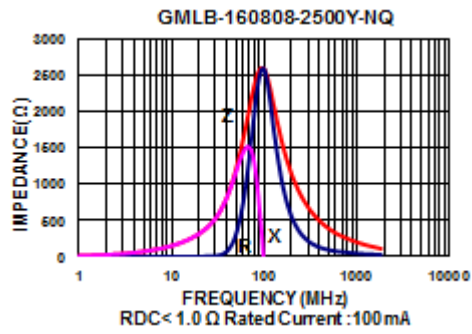
- Operating temperature range - 55°C ~ 125°C(Including self - temperature rise)
- Rate Current : Applied the current to coils, the temperature rise shall not be more than 30°C
- Measure Equipment :
Z : HP4291A
RDC : HP4338B or CHEN HWA 502

Test Instruments : Agilent E4991A Impedance / Material Analyzer



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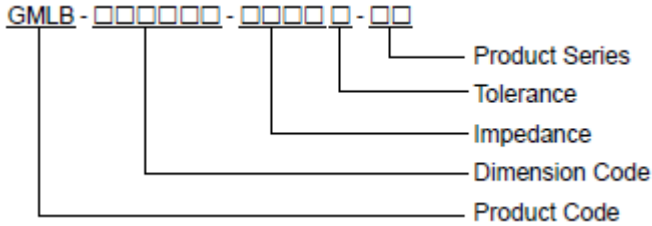
Multilayer Ferrite Chip Beads



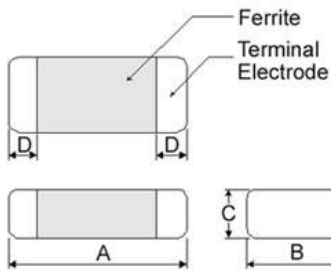
Mag.Layers offers a wide range of multi-layered ferrite chip beads with various sizes, frequency characteristics, and impedance values for EMI solutions.

These ferrite formulas are used to compose seven types of EMI suppression chip beads: SY, BK, SJ, GK, PY, UP, NQ, FY, FJ and HV series.

Product Identification



Shape and Dimensions



Dimensions in mm

| TYPE | A | B | C | D |
|---------|----------|-----------|----------|-----------|
| ①060303 | 0.6±0.03 | 0.30±0.03 | 0.3±0.03 | 0.15±0.05 |
| ②100505 | 1.0±0.10 | 0.50±0.10 | 0.5±0.10 | 0.25±0.10 |
| ③160805 | 1.6±0.15 | 0.80±0.15 | 0.5±0.15 | 0.3±0.2 |
| ④160808 | 1.6±0.15 | 0.80±0.15 | 0.8±0.15 | 0.3±0.2 |
| ⑤201209 | 2.0±0.20 | 1.25±0.20 | 0.9±0.20 | 0.5±0.3 |
| ⑥321611 | 3.2±0.20 | 1.60±0.20 | 1.1±0.20 | 0.5±0.3 |

① : SY / SJ / NQ / PY

② : SY / SJ / NQ / PY / UP / FY / FJ

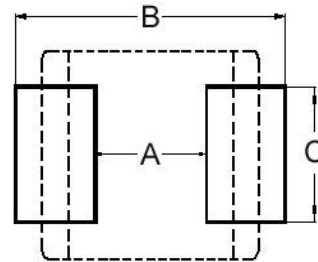
③ : UP ④ : BK / SJ / GK / PY / NQ / UP / HV

⑤ : BK / GK / PY / UP ⑥ : SY / BK / PY / UP

Dimension Conversion

| Code | Dimension in mm (AxBxC) | EIA |
|--------|----------------------------|------|
| 060303 | 0.6x0.3x0.3 | 0201 |
| 100505 | 1.0x0.5x0.5 | 0402 |
| 160805 | 1.6x0.8x0.5 | 0603 |
| 160808 | 1.6x0.8x0.8 | 0603 |
| 201209 | 2.0x1.2x0.9 | 0805 |
| 321611 | 3.2x1.6x1.1 | 1206 |

Recommended Pattern



Dimensions in mm

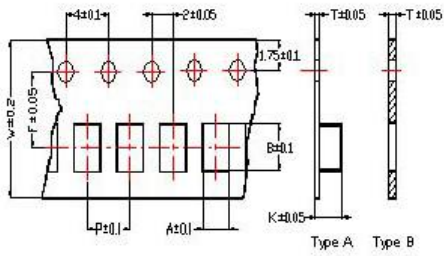
| TYPE | A | B | C |
|---------|-----------|-------------|-----------|
| ①060303 | 0.2 ~ 0.3 | 0.75 ~ 1.05 | 0.3 |
| ②100505 | 0.4 | 1.2 ~ 1.4 | 0.5 |
| ③160805 | 0.7 ~ 0.8 | 1.8 ~ 2.0 | 0.6 ~ 0.8 |
| ④160808 | 0.7 ~ 0.8 | 1.8 ~ 2.0 | 0.6 ~ 0.8 |
| ⑤201209 | 1.0 ~ 1.2 | 2.6 ~ 4.0 | 1.0 ~ 1.2 |
| ⑥321611 | 2.0 | 4.2 ~ 5.2 | 1.2 |

* Don't apply narrower pattern than listed above to PY and UP
Narrow pattern might cause excessive heat or open circuit.

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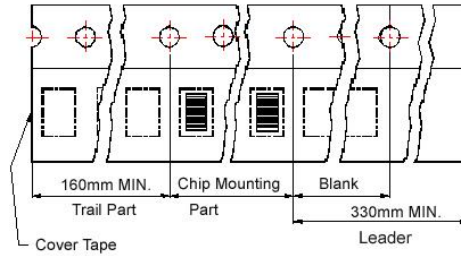
Packaging Specifications

Tape Dimensions

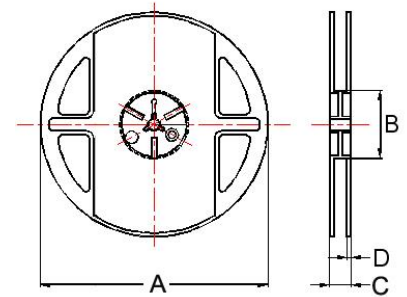


Tape Material

Carrier Tape: Polycarbonate (Tape A)
Carrier Tape: Paper (Tape B)
Cover Tape: Polystyrene



Reel Dimensions



- ① : SY/SJ/NQ/PY ③ : UP
- ② : SY/SJ/NQ/PY/UP/FY/FJ
- ④ : BK/SJ/GK/PY/NQ/UP/HV
- ⑤ : BK/GK/PY/UP
- ⑥ : SY/BK/PY/UP
- ⑦ : PY/UP

Dimensions in mm

| TYPE | Tape Dimensions | | | | | | | | Reel Dimensions | | | | Quantity PCS / REEL |
|---------|-----------------|------|------|-----|-----|-----|------|------|-----------------|----|----|-----|------------------------|
| | A | B | T | W | P | F | K | Tape | A | B | C | D | |
| ①060303 | 0.37 | 0.67 | 0.42 | 8.0 | 2.0 | 3.5 | - | B | 178 | 60 | 10 | 1.5 | 15000 |
| ②100505 | 0.62 | 1.12 | 0.60 | 8.0 | 2.0 | 3.5 | - | B | 178 | 60 | 12 | 1.5 | 10000 |
| ③160805 | 1.05 | 1.85 | 0.60 | 8.0 | 4.0 | 3.5 | - | B | 178 | 60 | 12 | 1.5 | 4000 |
| ④160808 | 1.05 | 1.85 | 0.95 | 8.0 | 4.0 | 3.5 | - | B | 178 | 60 | 12 | 1.5 | 4000 |
| ⑤201209 | 1.50 | 2.30 | 0.97 | 8.0 | 4.0 | 3.5 | - | B | 178 | 60 | 12 | 1.5 | 4000 |
| ⑥321611 | 1.88 | 3.50 | 0.22 | 8.0 | 4.0 | 3.5 | 1.27 | A | 178 | 60 | 12 | 1.5 | 3000 |
| ⑦453215 | 3.66 | 4.95 | 0.24 | 12 | 8.0 | 5.5 | 1.85 | A | 178 | 60 | 16 | 1.4 | 1000 |