

GMPI SERIES

Multilayer Ferrite Chip Inductors for Power Line Choke

■ FEATURES:

The GMPI series is magnetically shielded chip coils based on multilayer process.

New magnetic material is developed to get excellent direct current characteristics. This series has larger rated current than conventional GMLI series.

Low DC resistance is realized.

Low profile. (h=0.5~1.2mm)

Lead-free product.

■ APPLICATIONS

GMPI series is DC-DC converts and power modules used for the follow equipments.

- Mobile Phone
- PC/ Notebook
- HDD
- DSC
- DVC
- PDA
- Digital camera
- DVD

■ PRODUCT IDENTIFIATION

| | | | |
|------|---|--------|---------|
| ❶ | ❷ | ❸ | ❹ |
| GMPI | - | 322507 | - 4R7 N |

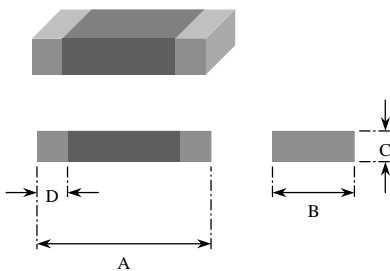
❶ Product Code

❷ Dimensions (in mm)

❸ Inductance Code

❹ Tolerance Code : N=±30% M=±20% K=±10%

■ PRODUCT DIMENSION



NOTE: Dimensions in mm

| PRODUCT NO. | A | B | C | D |
|-------------|----------|----------|----------|----------|
| GMPI-322512 | 3.2±0.20 | 2.5±0.20 | 1.2MAX | 0.5±0.30 |
| GMPI-322510 | 3.2±0.20 | 2.5±0.20 | 1.0MAX | 0.5±0.30 |
| GMPI-322507 | 3.2±0.20 | 2.5±0.20 | 0.7MAX | 0.5±0.30 |
| GMPI-252012 | 2.5±0.20 | 2.0±0.20 | 1.2MAX | 0.5±0.30 |
| GMPI-252010 | 2.5±0.20 | 2.0±0.20 | 1.0MAX | 0.5±0.30 |
| GMPI-252005 | 2.5±0.20 | 2.0±0.20 | 0.5MAX | 0.5±0.30 |
| GMPI-201610 | 2.0±0.20 | 1.6±0.20 | 1.0MAX | 0.5±0.30 |
| GMPI-201209 | 2.0±0.20 | 1.2±0.20 | 1.0MAX | 0.5±0.30 |
| GMPI-201205 | 2.0±0.20 | 1.2±0.20 | 0.55 MAX | 0.5±0.30 |

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■ PRODUCT SPECIFICATIONS

322512(1210)SIZES

| Part Number | Inductance (μ H) | Test Frequency (MHz) | DC Resistance (Ω) | Rated Current Max. (mA) |
|------------------|-----------------------|----------------------|----------------------------|-------------------------|
| GMPI-322512-R11M | 0.11 | 5 | 0.016MAX | 5500 |

322510(1210)SIZES

| Part Number | Inductance (μ H) | Test Frequency (MHz) | DC Resistance (Ω) | Rated Current Max. (mA) |
|--------------------|-----------------------|----------------------|----------------------------|-------------------------|
| GMPI-322510-1R0MF1 | 1.0 | 5 | 0.09 \pm 30% | 1400 |
| GMPI-322510-1R5MF1 | 1.5 | 5 | 0.09 \pm 30% | 1400 |
| GMPI-322510-2R2MF1 | 2.2 | 5 | 0.13 \pm 30% | 1100 |
| GMPI-322510-2R7MF1 | 3.0 | 5 | 0.12 \pm 30% | 1000 |
| GMPI-322510-3R3MF1 | 3.3 | 5 | 0.11 \pm 30% | 1200 |
| GMPI-322510-4R7MF1 | 4.7 | 5 | 0.13 \pm 30% | 1100 |
| GMPI-322510-6R8MF1 | 6.8 | 5 | 0.16 \pm 30% | 1000 |

322507(1210)SIZES

| Part Number | Inductance (μ H) | Test Frequency (MHz) | DC Resistance (Ω) | Rated Current Max. (mA) |
|------------------|-----------------------|----------------------|----------------------------|-------------------------|
| GMPI-322507-R45M | 0.45 | 5 | 0.06MAX | 2000 |
| GMPI-322507-1R0M | 1.00 | 5 | 0.12MAX | 1300 |

252012(1008)SIZES

| Part Number | Inductance (μ H) | Test Frequency (MHz) | DC Resistance (Ω) | Rated Current Max. (mA) |
|--------------------|-----------------------|----------------------|----------------------------|-------------------------|
| GMPI-252012-R47MF1 | 0.47 | 5 | 0.06 \pm 30% | 1400 |
| GMPI-252012-1R0MF1 | 1.0 | 5 | 0.06 \pm 30% | 1600 |
| GMPI-252012-1R5MF1 | 1.5 | 5 | 0.10 \pm 30% | 1200 |
| GMPI-252012-2R2MF1 | 2.2 | 5 | 0.11 \pm 30% | 1100 |
| GMPI-252012-3R3MF1 | 3.3 | 5 | 0.12 \pm 30% | 1000 |
| GMPI-252012-4R7MF1 | 4.7 | 5 | 0.11 \pm 30% | 1000 |
| GMPI-252012-6R8MF1 | 6.8 | 5 | 0.22 \pm 30% | 800 |

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252010(1008)SIZES

| Part Number | Inductance (μ H) | Test Frequency (MHz) | DC Resistance (Ω) | Rated Current Max. (mA) |
|--------------------|-----------------------|----------------------|----------------------------|-------------------------|
| GMPI-252010-R47MF1 | 0.47 | 5 | 0.04 \pm 30% | 1800 |
| GMPI-252010-1R0MF1 | 1.0 | 5 | 0.055 \pm 30% | 1600 |
| GMPI-252010-1R5MF1 | 1.5 | 5 | 0.07 \pm 30% | 1500 |
| GMPI-252010-2R2MF1 | 2.2 | 5 | 0.08 \pm 30% | 1300 |
| GMPI-252010-3R3MF1 | 3.3 | 5 | 0.10 \pm 30% | 1200 |
| GMPI-252010-4R7MF1 | 4.7 | 5 | 0.11 \pm 30% | 1100 |
| GMPI-252010-1R0MF2 | 1.0 | 5 | 0.09 \pm 30% | 1200 |
| GMPI-252010-1R5MF2 | 1.5 | 5 | 0.10 \pm 30% | 1100 |
| GMPI-252010-2R2MF2 | 2.2 | 5 | 0.11 \pm 30% | 1100 |
| GMPI-252010-3R3MF2 | 3.3 | 5 | 0.12 \pm 30% | 1000 |

252005(1008)SIZES

| Part Number | Inductance (μ H) | Test Frequency (MHz) | DC Resistance (Ω) | Rated Current Max. (mA) |
|--------------------|-----------------------|----------------------|----------------------------|-------------------------|
| GMPI-252005-R50MF1 | 0.5 | 5 | 0.08 \pm 30% | 1300 |
| GMPI-252005-1R0MF1 | 1.0 | 5 | 0.08 \pm 30% | 1300 |

201610(0806)SIZES

| Part Number | Inductance (μ H) | Test Frequency (MHz) | DC Resistance (Ω) | Rated Current Max. (mA) |
|--------------------|-----------------------|----------------------|----------------------------|-------------------------|
| GMPI-201610-1R5MF1 | 1.5 | 5 | 0.11 \pm 30% | 1100 |
| GMPI-201610-2R2MF1 | 2.2 | 5 | 0.11 \pm 30% | 1100 |
| GMPI-201610-3R3MF1 | 3.3 | 5 | 0.13 \pm 30% | 1000 |
| GMPI-201610-4R7MF1 | 4.7 | 5 | 0.16 \pm 30% | 900 |

201209(0805)SIZES

| Part Number | Inductance (μ H) | Test Frequency (MHz) | DC Resistance (Ω) | Rated Current Max. (mA) |
|--------------------|-----------------------|----------------------|----------------------------|-------------------------|
| GMPI-201209-1R0MF1 | 1.0 | 5 | 0.09 \pm 30% | 1100 |
| GMPI-201209-1R5MF1 | 1.5 | 5 | 0.17 \pm 30% | 1400 |
| GMPI-201209-2R2MF1 | 2.2 | 5 | 0.23 \pm 30% | 700 |
| GMPI-201209-3R3MF1 | 3.3 | 5 | 0.19 \pm 30% | 800 |
| GMPI-201209-4R7MF1 | 4.7 | 5 | 0.23 \pm 30% | 700 |

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201205(0805)SIZES

| Part Number | Inductance (μ H) | Test Frequency (MHz) | DC Resistance (Ω) | Rated Current Max. (mA) |
|--------------------|--------------------------|-------------------------|-------------------------------|----------------------------|
| GMPI-201205-R47MU1 | 0.47 | 5 | 0.15(Max) | 1100 |
| GMPI-201205-1R0MU1 | 1.0 | 5 | 0.24(Max) | 800 |
| GMPI-201205-1R5MU1 | 1.5 | 5 | 0.33(Max) | 700 |
| GMPI-201205-2R2MU1 | 2.2 | 5 | 0.43(Max) | 600 |

REMARK:

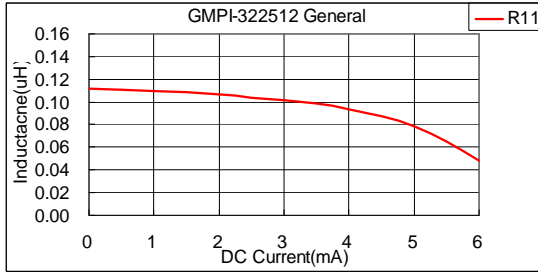
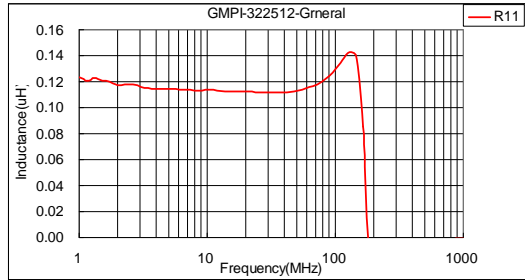
- Inductance test condition: Agilent 4291 RF Impedance Analyzer with test fixture 16192A and osc. level = 1mA .
- Temperature rise should be less than 40°C .

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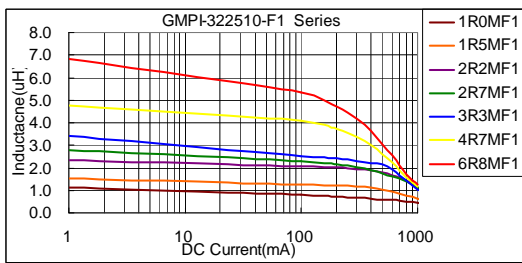
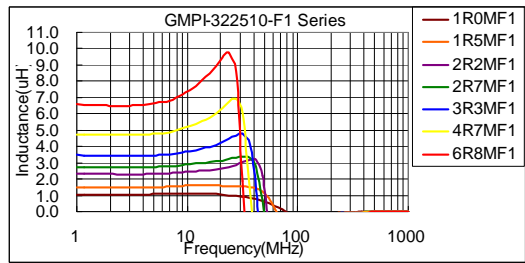
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TYPICAL ELECTRICAL CHARACTERISTIC CURVES

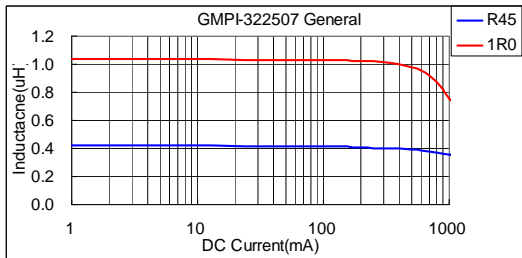
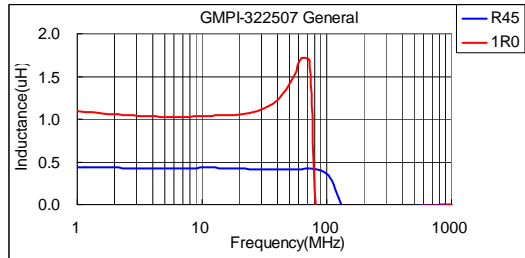
322512(1210)SIZES



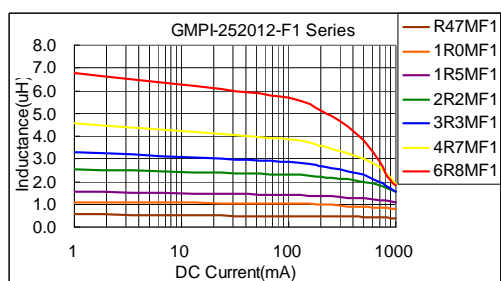
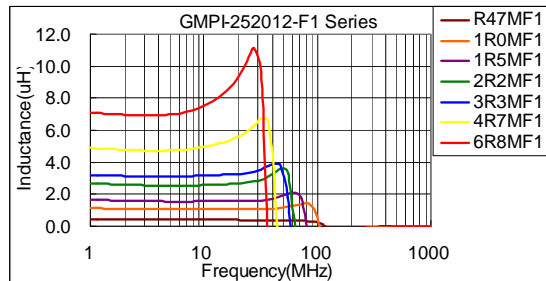
322510(1210)SIZES



322507(1210)SIZES



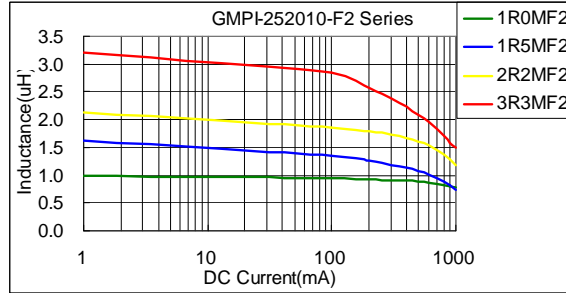
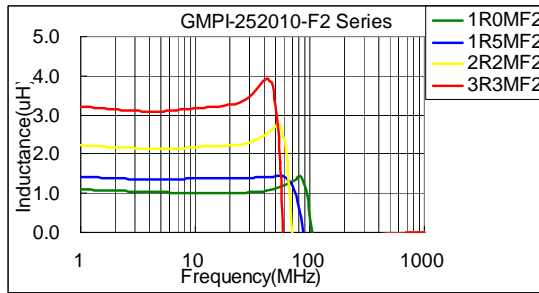
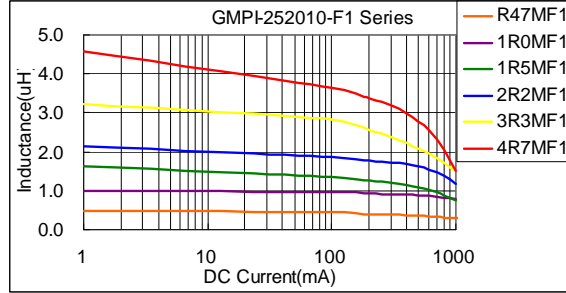
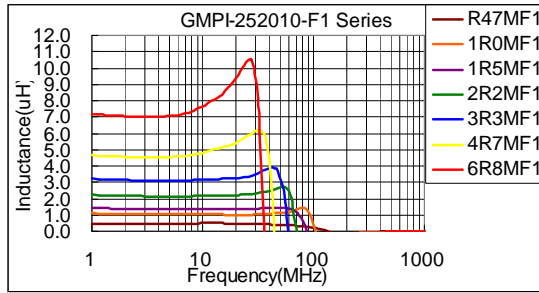
252012(1008)SIZES



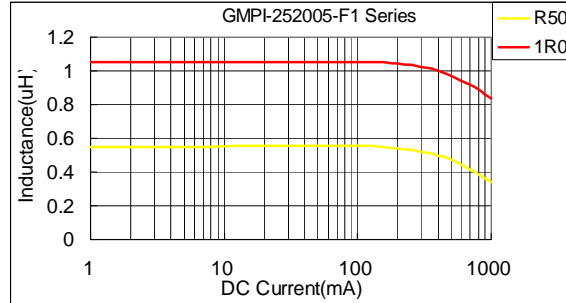
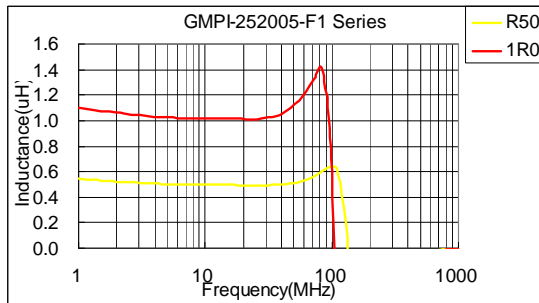
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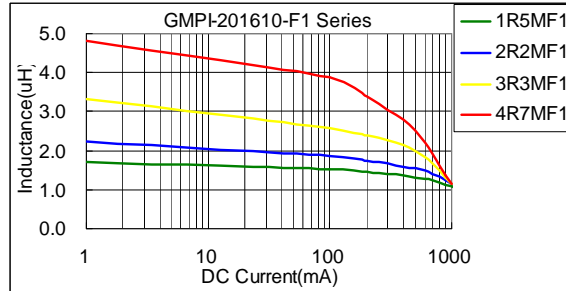
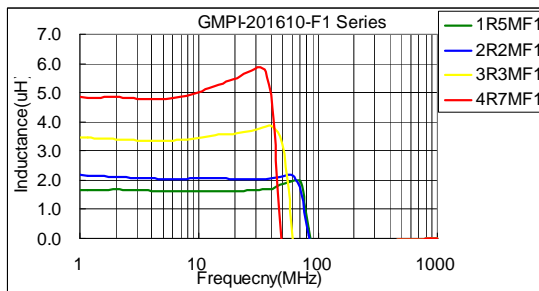
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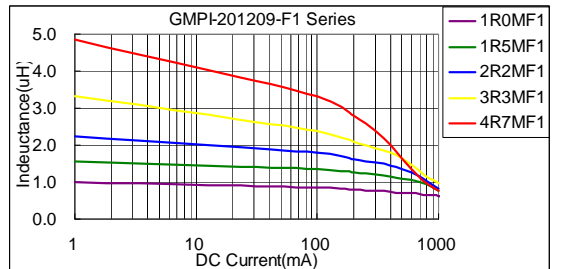
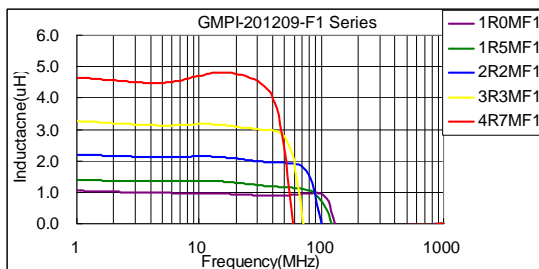
252005(1008)SIZES



201610(0806)SIZES



201209(0805)SIZES



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201205(0805)SIZES

