

BMME Series



BMME Series is designed for low profile type with low RDC and ultra large current. Its molded magnetic shielded type is suitable for high-density mounting and ultra low buzz noise. Soldering conditions can be easily confirmed when mounting onto the board. This series also provides customers with embossed carrier type packaging for automatic mounting machine.

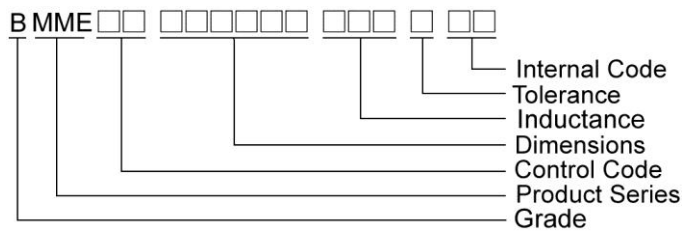
Features

- RoHS, Halogen Free and REACH Compliance
- Low resistance and high current rating
- Magnetic core made by high performance magnetic powder

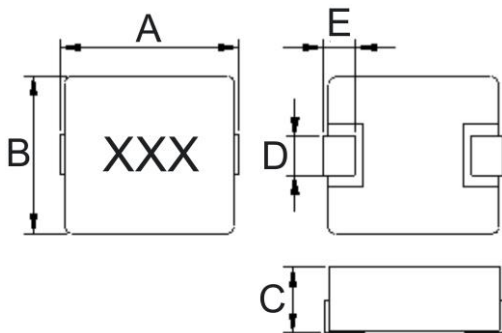
Applications

- Laptop and desktop applications
- High current power supplies
- PMIC
- DC/DC converters

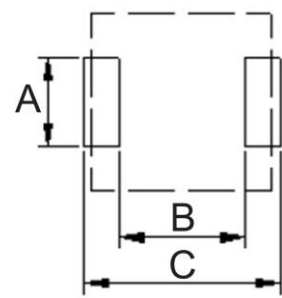
Product Identification



Shape and Dimensions



Recommended Pattern



Dimensions in mm

| TYPE | A | B | C | D | E |
|-----------------|-----------|-----------|---------|---------|----------|
| BMME00040412-EX | 4.4±0.35 | 4.2±0.25 | 1.0±0.2 | 2.0±0.3 | 0.8±0.3 |
| BMME00040412 | 4.45±0.25 | 4.06±0.25 | 1.2Max | 2.0±0.3 | 0.76±0.3 |
| BMME00050512 | 5.49±0.25 | 5.18±0.22 | 1.2Max | 2.0±0.3 | 1.0±0.3 |
| BMME00050530 | 5.3Max | 4.7±0.2 | 3.0Max | 2.0±0.2 | 1.0±0.3 |
| BMME00060618 | 6.95±0.35 | 6.6±0.2 | 1.8Max | 3.0±0.3 | 1.6±0.3 |
| BMME00060630 | 6.86±0.38 | 6.47±0.25 | 3.0Max | 3.0±0.3 | 1.3±0.3 |
| BMME00080850 | 8.3±0.3 | 8.1±0.3 | 5.0Max | 3.0±0.3 | 1.5±0.3 |
| BMME00101020 | 11.5Max | 10±0.3 | 2.0Max | 3.0±0.5 | 2.2±0.3 |

Dimensions in mm

| TYPE | A | B | C |
|-----------------|------|------|------|
| BMME00040412-EX | 2.5 | 2.2 | 5.2 |
| BMME00040412 | 2.5 | 2.2 | 5.2 |
| BMME00050512 | 2.5 | 2.2 | 5.99 |
| BMME00050530 | 2.5 | 3.0 | 7.0 |
| BMME00060618 | 3.5 | 3.7 | 8.4 |
| BMME00060630 | 3.43 | 3.71 | 7.37 |
| BMME00080850 | 3.5 | 4.2 | 9 |
| BMME00101020 | 4.1 | 5.4 | 13.6 |

Please be sure to request approval specifications that provide further details of the products. Kindly note that the content of these specifications are subject to change or may be discontinued without prior notice. This product may not be designed/used in medical or high risk applications without Chilisin approval. Please contact our sales department before ordering.

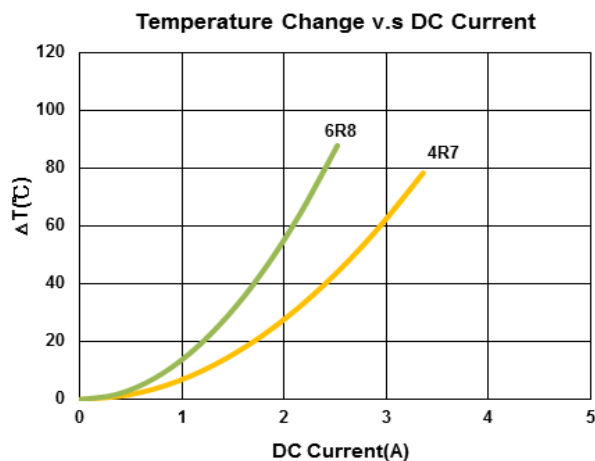
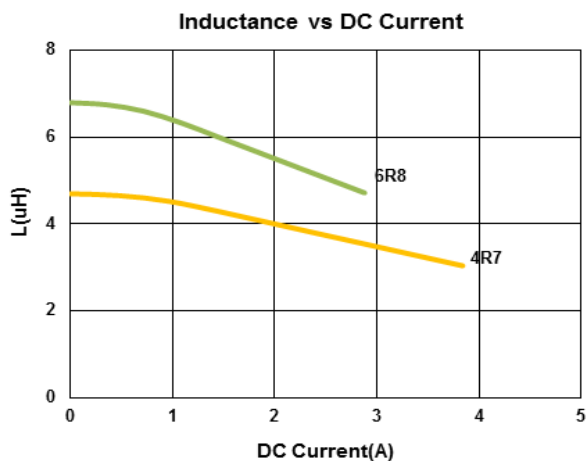
Electrical Characteristics

| Part Number | Inductance (uH) | Tolerance (±%) | Test Frequency (kHz) | RDC(mΩ) Max(Typ.) | Isat(A) Max(Typ.) | Irms(A) Max(Typ.) | Marking |
|--------------------|-----------------|----------------|----------------------|-------------------|-------------------|-------------------|---------|
| BMME000404124R7MEX | 4.7 | 20 | 100 | 145(124) | 2.8(3.2) | 2.1(2.4) | 4R7 |
| BMME000404126R8MEX | 6.8 | 20 | 100 | 355(300) | 2.3(2.7) | 1.5(1.7) | 6R8 |

Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- Operating temperature range - 55°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 30% from its value without current
- Irms for a 40°C temperature rise from 25°C ambient with current
- Measure Equipment :
 L : WK 3260B or WK 6500P, 100kHz 0.25V
 RDC : CHEN HWA 502 or CHEN HWA 46502B
 Irms : CHROMA 1810

Test Instruments : WK3260B Impedance / Material Analyzer



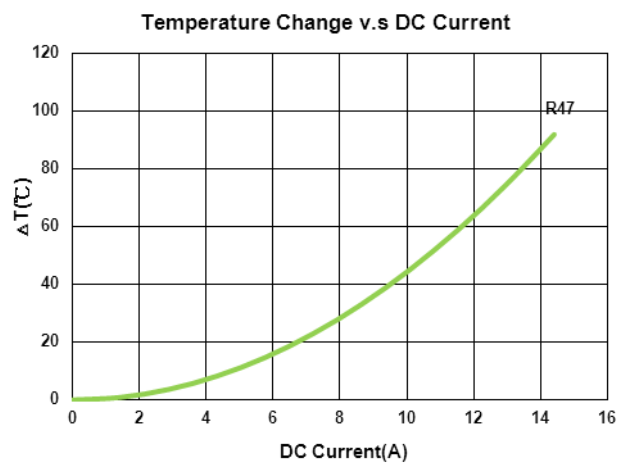
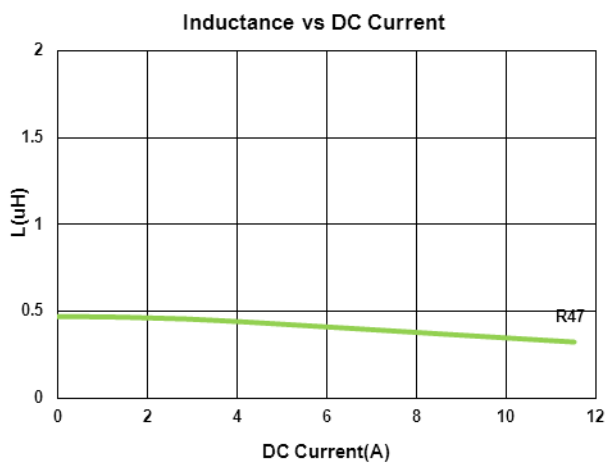
Electrical Characteristics

| Part Number | Inductance (uH) | Tolerance (±%) | Test Frequency (kHz) | RDC(mΩ) Max(Typ.) | Isat(A) Max(Typ.) | Irms(A) Max(Typ.) | Marking |
|--------------------|-----------------|----------------|----------------------|-------------------|-------------------|-------------------|---------|
| BMME00040412R47MX2 | 0.47 | 20 | 100 | 18.4(16) | 9.2(10.6) | 8.5(9.5) | R47 |

Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- Operating temperature range - 55°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 30% from its value without current
- Irms for a 40°C temperature rise from 25°C ambient with current
- Measure Equipment :
 L : WK 3260B or WK 6500P, 100kHz 0.25V
 RDC : CHEN HWA 502 or CHEN HWA 46502B
 Irms : CHROMA 1810

Test Instruments : WK3260B Impedance / Material Analyzer



Molding Power Inductors – BMME Series

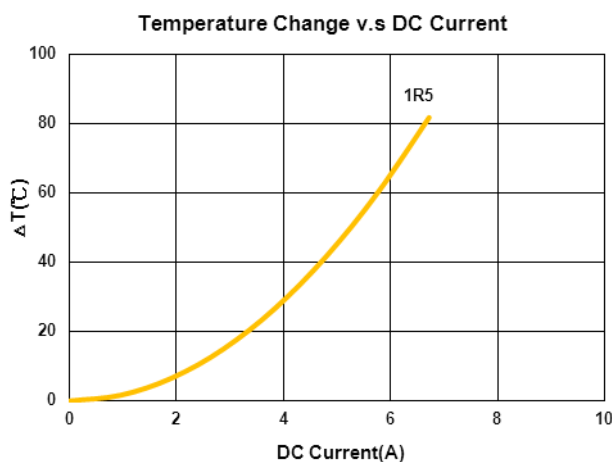
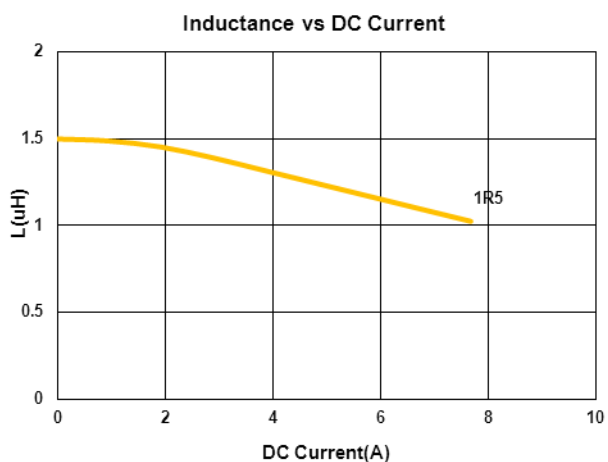
Electrical Characteristics

| Part Number | Inductance (uH) | Tolerance (±%) | Test Frequency (kHz) | RDC(mΩ) Max(Typ.) | Isat(A) Max(Typ.) | Irms(A) Max(Typ.) | Marking |
|--------------------|-----------------|----------------|----------------------|-------------------|-------------------|-------------------|---------|
| BMME000505121R5MX1 | 1.5 | 20 | 100 | 50(42) | 6.3(7) | 4.3(4.7) | 1R5 |

Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- Operating temperature range - 55°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 30% from its value without current
- I rms for a 40°C temperature rise from 25°C ambient with current
- Measure Equipment :
 L : WK 3260B or WK 6500P, 100kHz 0.25V
 RDC : CHEN HWA 502 or CHEN HWA 46502B
 I rms : CHROMA 1810

Test Instruments : WK3260B Impedance / Material Analyzer



Molding Power Inductors – BMME Series

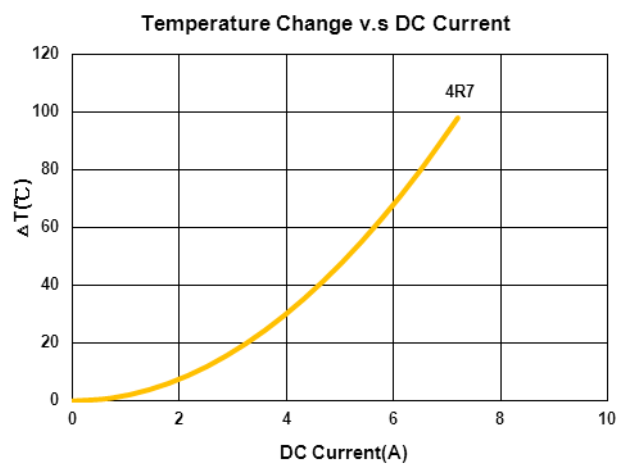
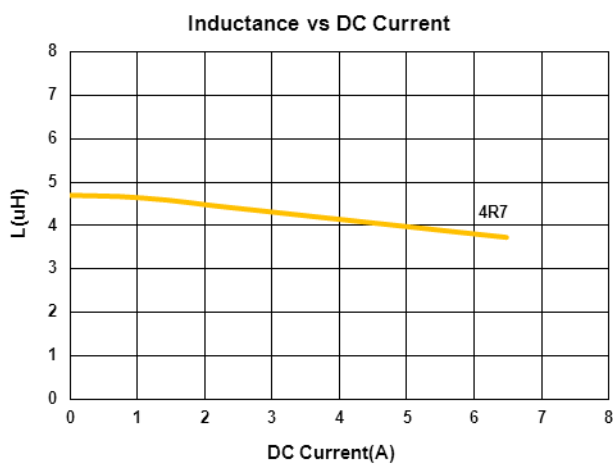
Electrical Characteristics

| Part Number | Inductance (uH) | Tolerance (±%) | Test Frequency (kHz) | RDC(mΩ) Max(Typ.) | Isat (A)Typ. | Irms (A)Typ. | Marking |
|--------------------|-----------------|----------------|----------------------|-------------------|--------------|--------------|---------|
| BMME000505304R7MX1 | 4.7 | 20 | 100 | 53(47.7) | 6 | 4.6 | 4R7 |

Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- Operating temperature range - 55°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 20% from its value without current
- I rms for a 40°C temperature rise from 25°C ambient with current
- Measure Equipment :
 L : WK 3260B or WK 6500P, 100kHz 0.25V
 RDC : CHEN HWA 502 or CHEN HWA 46502B
 I rms : CHROMA 1810

Test Instruments : WK3260B Impedance / Material Analyzer



Molding Power Inductors – BMME Series

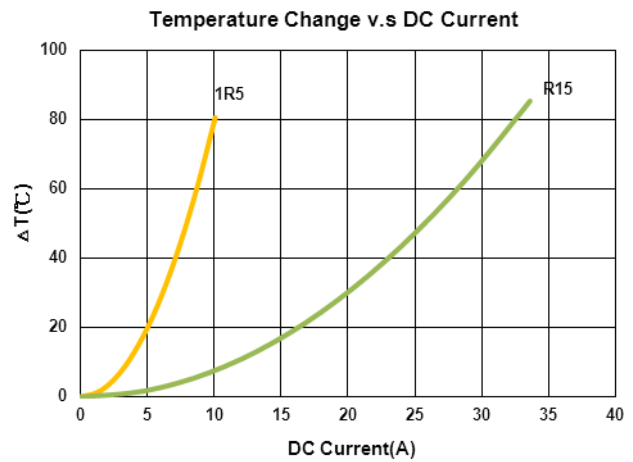
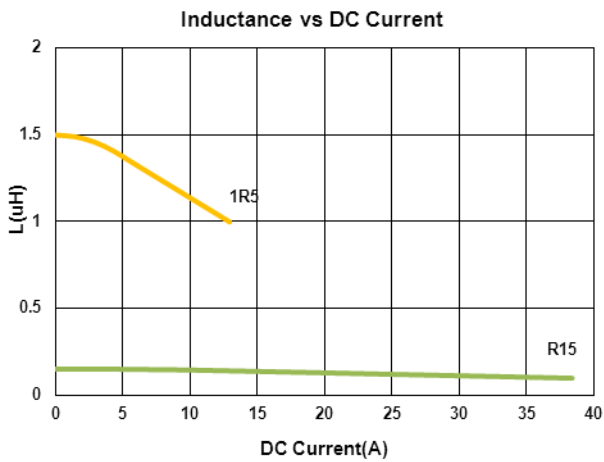
Electrical Characteristics

| Part Number | Inductance (uH) | Tolerance (±%) | Test Frequency (kHz) | RDC(mΩ) Max(Typ.) | Isat(A) Max(Typ.) | Irms(A) Max(Typ.) | Marking |
|--------------------|-----------------|----------------|----------------------|-------------------|-------------------|-------------------|---------|
| BMME00060618R15MX1 | 0.15 | 20 | 100 | 3.4(2.9) | 30(35) | 21(23) | R15 |
| BMME000606181R5MX1 | 1.5 | 20 | 100 | 20(17) | 9.8(11.3) | 6.5(7.1) | 1R5 |

Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- Operating temperature range - 55°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 30% from its value without current
- I rms for a 40°C temperature rise from 25°C ambient with current
- Measure Equipment :
 L : WK 3260B or WK 6500P, 100kHz 0.25V
 RDC : CHEN HWA 502 or CHEN HWA 46502B
 I rms : CHROMA 1810

Test Instruments : WK3260B Impedance / Material Analyzer



Molding Power Inductors – BMME Series

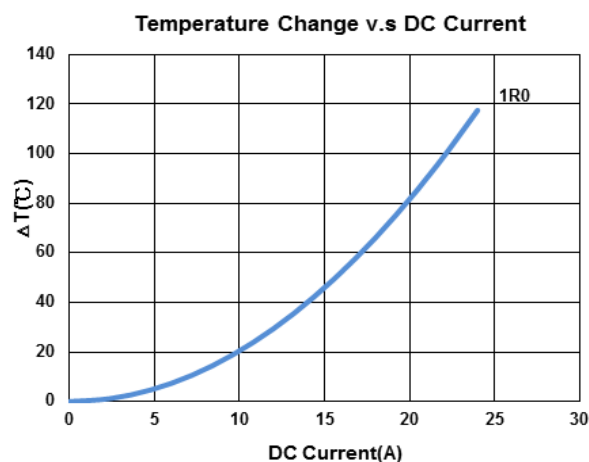
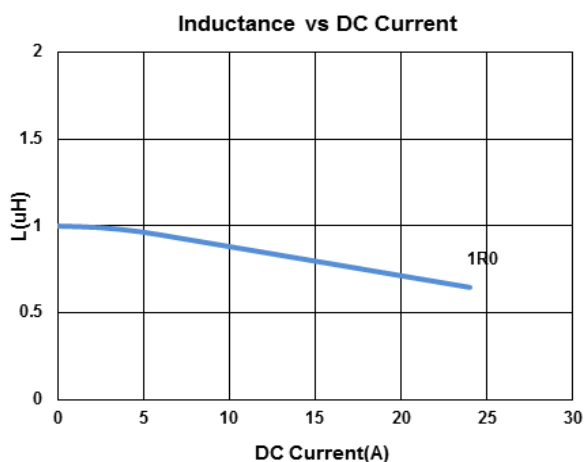
Electrical Characteristics

| Part Number | Inductance (uH) | Tolerance (±%) | Test Frequency (kHz) | RDC (mΩ) ±10% | Isat (A)Typ. | Irms (A)Typ. | Marking |
|--------------------|-----------------|----------------|----------------------|---------------|--------------|--------------|---------|
| BMME000606301R0MI8 | 1.0 | 20 | 100 | 5.5 | 17 | 14 | 1R0 |

Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- Operating temperature range - 55°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 25% from its value without current
- Irms for a 40°C temperature rise from 25°C ambient with current
- Measure Equipment :
 L : WK 3260B or WK 6500P, 100kHz 0.25V
 RDC : CHEN HWA 502 or CHEN HWA 46502B
 Irms : CHROMA 1810

Test Instruments : WK3260B Impedance / Material Analyzer



Molding Power Inductors – BMME Series

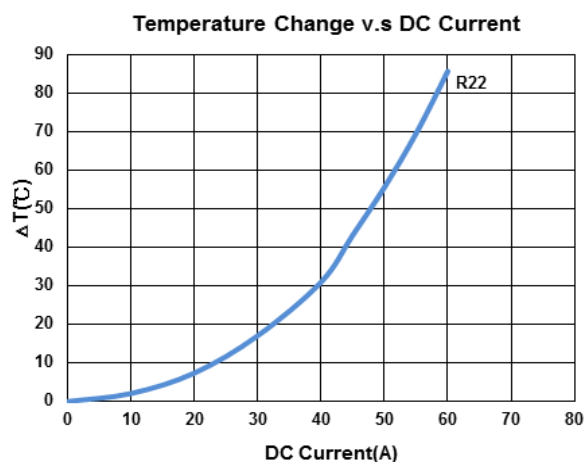
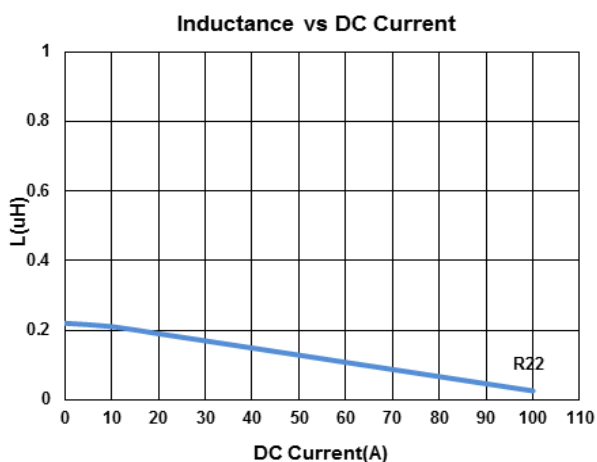
Electrical Characteristics

| Part Number | Inductance (uH) | Tolerance (±%) | Test Frequency (kHz) | RDC (mΩ)±10% | Isat (A)Typ. | Irms (A)Typ. | Marking |
|--------------------|-----------------|----------------|----------------------|--------------|--------------|--------------|---------|
| BMME00080850R22MI8 | 0.22 | 20 | 100 | 0.71 | 50 | 40 | R22 |

Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- Operating temperature range - 55°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 25% from its value without current
- Iirms for a 40°C temperature rise from 25°C ambient with current
- Measure Equipment :
 L : WK 3260B or WK 6500P, 100kHz 0.25V
 RDC : CHEN HWA 502 or CHEN HWA 46502B
 Iirms : CHROMA 1810

Test Instruments : WK3260B Impedance / Material Analyzer



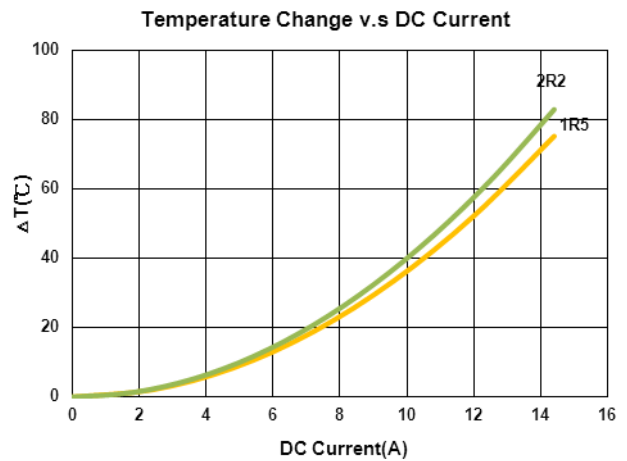
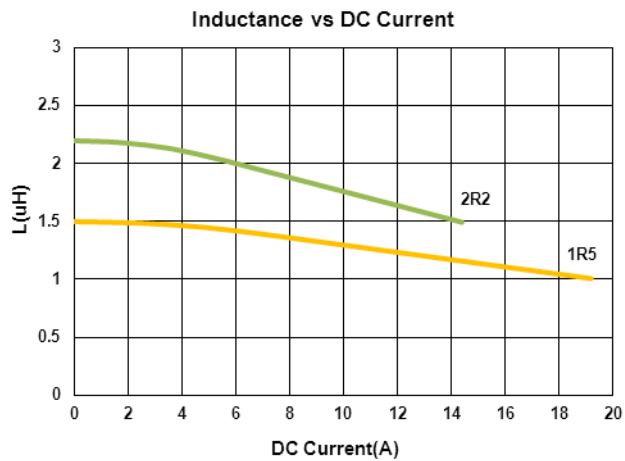
Electrical Characteristics

| Part Number | Inductance (uH) | Tolerance (±%) | Test Frequency (kHz) | RDC(mΩ) Max(Typ.) | Isat (A)Typ. | Irms(A) (A)Typ. | Marking |
|--------------------|-----------------|----------------|----------------------|-------------------|--------------|-----------------|---------|
| BMME001010201R5MX1 | 1.5 | 20 | 100 | 14.5(12.2) | 14(17) | 9.5(10.5) | 1R5 |
| BMME001010202R2MX1 | 2.2 | 20 | 100 | 16.5(14) | 11(13) | 8.5(10) | 2R2 |

Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- Operating temperature range - 55°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 30% from its value without current
- I rms for a 40°C temperature rise from 25°C ambient with current
- Measure Equipment :
 L : WK 3260B or WK 6500P, 100kHz 0.25V
 RDC : CHEN HWA 502 or CHEN HWA 46502B
 I rms : CHROMA 1810

Test Instruments : WK3260B Impedance / Material Analyzer

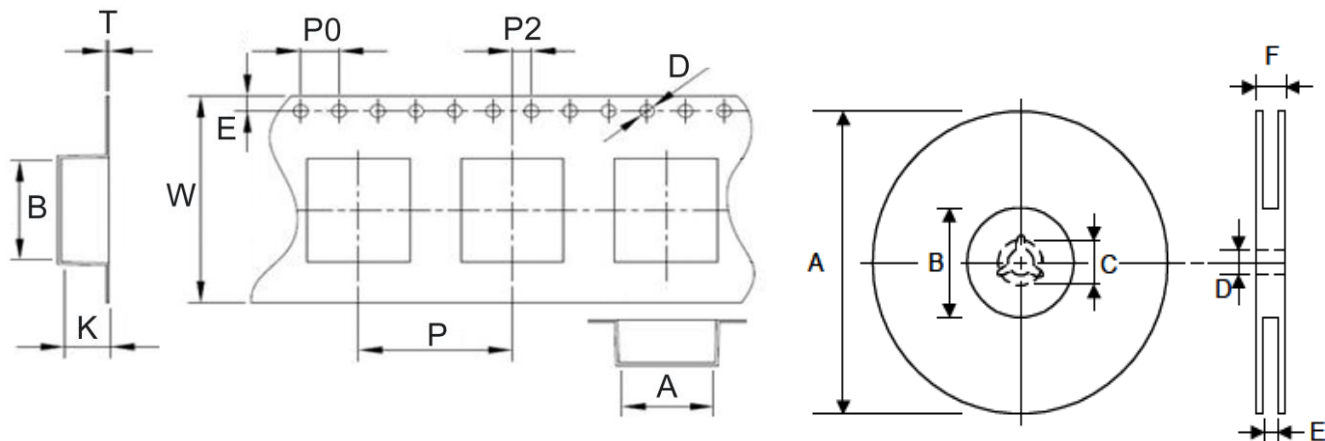


Molding Power Inductors – BMME Series

Packaging Specifications

Tape Dimensions

Reel Dimensions



Dimensions in mm

| TYPE | Tape Dimensions | | | | | | | | | | Reel Dimensions | | | | | | Quantity |
|-----------------|-----------------|------|-----|------|-----|------|----|----|----|----|-----------------|-----|------|----|------|------|------------|
| | A | B | K | T | D | E | W | P | P0 | P2 | A | B | C | D | E | F | PCS / REEL |
| BMME00040412-EX | 4.4 | 4.9 | 1.5 | 0.3 | 1.5 | 1.75 | 12 | 8 | 4 | 2 | 330 | 100 | 21.5 | 13 | 12.4 | 17.4 | 2000 |
| BMME00040412 | 4.5 | 4.9 | 1.7 | 0.35 | 1.5 | 1.75 | 12 | 8 | 4 | 2 | 330 | 100 | 21.5 | 13 | 12.4 | 17.4 | 2000 |
| BMME00050512 | 5.4 | 5.8 | 1.4 | 0.3 | 1.5 | 1.75 | 12 | 8 | 4 | 2 | 330 | 100 | 21.5 | 13 | 12.4 | 17.4 | 1000 |
| BMME00050530 | 5.0 | 5.4 | 3.2 | 0.35 | 1.5 | 1.75 | 12 | 8 | 4 | 2 | 330 | 100 | 21.5 | 13 | 12.4 | 17.4 | 1000 |
| BMME00060618 | 6.9 | 7.5 | 2.1 | 0.3 | 1.5 | 1.75 | 16 | 12 | 4 | 2 | 330 | 100 | 21.5 | 13 | 16.4 | 21.4 | 1000 |
| BMME00060630 | 6.9 | 7.6 | 3.4 | 0.4 | 1.5 | 1.75 | 16 | 12 | 4 | 2 | 330 | 100 | 21.5 | 13 | 16.4 | 21.4 | 1000 |
| BMME00080850 | 8.3 | 8.5 | 5.2 | 0.4 | 1.5 | 1.75 | 16 | 12 | 4 | 2 | 330 | 100 | 21.5 | 13 | 16.4 | 21.4 | 500 |
| BMME00101020 | 10.4 | 11.5 | 2.8 | 0.35 | 1.5 | 1.75 | 24 | 16 | 4 | 2 | 330 | 100 | 21.5 | 13 | 24.4 | 29.2 | 500 |