## **BMMN Series**



BMMN 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.

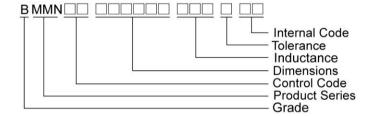
#### **Features**

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

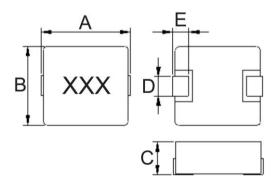
## **Applications**

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

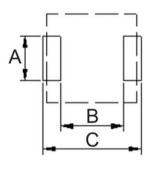
## **Product Identification**



## **Shape and Dimensions**



## **Recommended Pattern**



## Dimensions in mm

| TYPE         | Α         | В         | С      | D       | E        |
|--------------|-----------|-----------|--------|---------|----------|
| BMMN00040412 | 4.45±0.25 | 4.06±0.25 | 1.2Max | 2.0±0.3 | 0.76±0.3 |
| BMMN00040420 | 4.45±0.25 | 4.06±0.25 | 2.0Max | 2.0±0.3 | 0.76±0.3 |
| BMMN00050512 | 5.49±0.25 | 5.18±0.22 | 1.2Max | 2.0±0.3 | 1.0±0.3  |
| BMMN00050515 | 5.49±0.25 | 5.18±0.22 | 1.5Max | 2.0±0.3 | 1.0±0.3  |
| BMMN00050518 | 5.49±0.25 | 5.18±0.22 | 1.8Max | 2.0±0.3 | 1.0±0.3  |
| BMMN00050530 | 5.3Max    | 4.7±0.2   | 3.0Max | 2.0±0.2 | 1.0±0.3  |
| BMMN00060615 | 6.86±0.38 | 6.47±0.25 | 1.5Max | 3.0±0.3 | 1.3±0.3  |
| BMMN00060618 | 7.4Max    | 6.6±0.2   | 1.8Max | 3.0±0.3 | 1.6±0.3  |
| BMMN00060630 | 6.95±0.35 | 6.6±0.2   | 3.0Max | 3.0±0.3 | 1.6±0.3  |

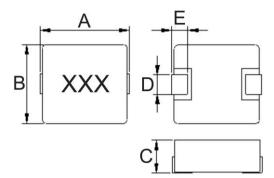
Dimensions in mm

| TYPE         | Α    | В    | С    |
|--------------|------|------|------|
| BMME00040412 | 2.5  | 2.2  | 5.2  |
| BMME00040420 | 2.5  | 2.2  | 5.2  |
| BMMN00050512 | 2.5  | 2.2  | 5.99 |
| BMMN00050515 | 2.5  | 2.2  | 5.99 |
| BMMN00050518 | 2.5  | 2.2  | 5.99 |
| BMMN00050530 | 2.5  | 3.0  | 7.0  |
| BMMN00060615 | 3.43 | 3.71 | 7.37 |
| BMMN00060618 | 3.5  | 3.7  | 8.4  |
| BMMN00060630 | 3.5  | 3.7  | 8.4  |
|              |      |      |      |

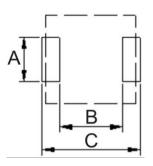




## **Shape and Dimensions**



## **Recommended Pattern**



## Dimensions in mm

| TYPE            | Α        | В        | С      | D        | E       |
|-----------------|----------|----------|--------|----------|---------|
| BMMN00101020    | 11.5Max  | 10±0.3   | 2.0Max | 3.0±0.5  | 2.2±0.3 |
| BMMN00101030    | 11.5Max  | 10±0.3   | 3.0Max | 3.0±0.5  | 2.0±0.5 |
| BMMN00101040-X1 | 11.5Max  | 10±0.3   | 4.0Max | 3.0±0.5  | 2.2±0.3 |
| BMMN00101040-X2 | 11.5Max  | 10±0.3   | 4.0Max | 3.0±0.5  | 2.0±0.5 |
| BMMN00131350    | 13.2±0.5 | 12.9Max  | 5.0Max | 3.5±0.5  | 2.3±0.3 |
| BMMN00131360    | 14.2Max  | 12.6±0.2 | 6.0Max | 3.2±0.3  | 2.3±0.3 |
| BMMN00131365    | 13.2±0.5 | 12.6±0.2 | 6.5Max | 3.2±0.3  | 2.3±0.3 |
| BMMN00171770    | 17.6±0.5 | 17.2Max  | 7.0Max | 11.8±0.3 | 2.5±0.5 |

## Dimensions in mm

| TYPE            | Α    | В    | С    |
|-----------------|------|------|------|
| BMMN00101020    | 4.1  | 5.4  | 13.6 |
| BMMN00101030    | 4.1  | 5.4  | 13.6 |
| BMMN00101040-X1 | 4.1  | 5.4  | 13.6 |
| BMMN00101040-X2 | 4.1  | 5.4  | 13.6 |
| BMMN00131350    | 5.0  | 8.0  | 14.5 |
| BMMN00131360    | 5.0  | 8.0  | 14.5 |
| BMMN00131365    | 5.0  | 8.0  | 14.5 |
| BMMN00171770    | 12.8 | 11.2 | 18.2 |
|                 |      |      |      |





## **Electrical Characteristics**

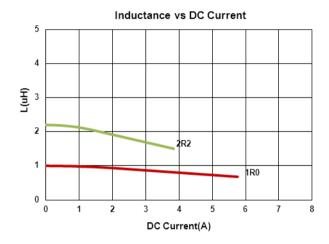
| Part Number        | Inductance<br>(uH) | Tolerance<br>(±%) | Test<br>Frequency<br>(kHz) | RDC(m $\Omega$ ) Max(Typ.) | Isat<br>(A)Typ. | Irms<br>(A)Typ. | Marking |
|--------------------|--------------------|-------------------|----------------------------|----------------------------|-----------------|-----------------|---------|
| BMMN000404121R0MX2 | 1.0                | 20                | 100                        | 47(43)                     | 5.2             | 4.2             | 1R0     |
| BMMN000404122R2MX2 | 2.2                | 20                | 100                        | 83.5(79.4)                 | 3.5             | 2.75            | 2R2     |

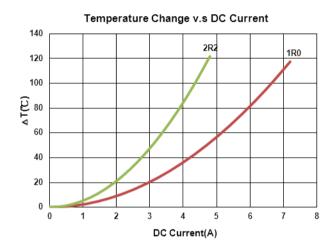
#### Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- Operating temperature range −55°C ~125°C (Including self temperature rise)
- Isat for Inductance drop 30% from its value without current
- Irms for a 40  $^{\circ}\!\mathbb{C}$  temperature rise from 25  $^{\circ}\!\mathbb{C}$  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







## **Electrical Characteristics**

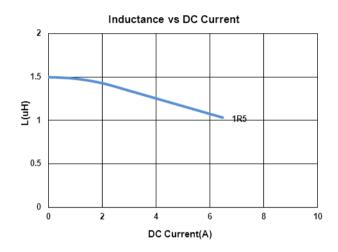
| Part Number        | Inductance<br>(uH) | Tolerance<br>(±%) | Test<br>Frequency<br>(kHz) | RDC(m $\Omega$ )<br>Max(Typ.) | Isat<br>(A)Typ. | Irms<br>(A)Typ. | Marking |
|--------------------|--------------------|-------------------|----------------------------|-------------------------------|-----------------|-----------------|---------|
| BMMN000404201R5MX2 | 1.5                | 20                | 100                        | 43(35)                        | 6               | 4               | 1R5     |

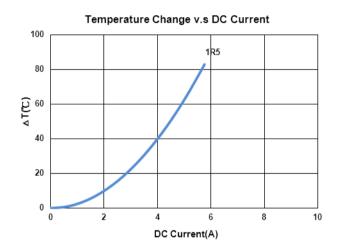
#### Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- Operating temperature range  $-55^{\circ}\text{C} \sim 125^{\circ}\text{C}$  (Including self temperature rise)
- Isat for Inductance drop 30% from its value without current
- Irms for a 40<sup>o</sup>C temperature rise from 25<sup>o</sup>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







## **Electrical Characteristics**

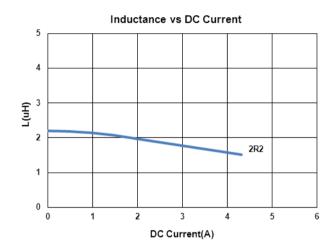
| Part Number        | Inductance<br>(uH) | Tolerance<br>(±%) | Test<br>Frequency<br>(kHz) | RDC(m $\Omega$ )<br>Max(Typ.) | Isat<br>(A)Typ. | Irms<br>(A)Typ | Marking |
|--------------------|--------------------|-------------------|----------------------------|-------------------------------|-----------------|----------------|---------|
| BMMN000505122R2MX1 | 2.2                | 20                | 100                        | 76(67)                        | 4               | 3.5            | 2R2     |

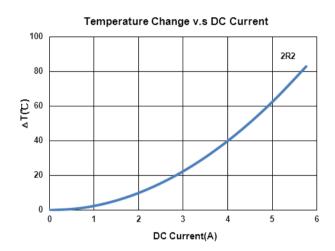
#### Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- Operating temperature range  $-55^{\circ}\text{C} \sim 125^{\circ}\text{C}$  (Including self temperature rise)
- Isat for Inductance drop 30% from its value without current
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- Measure Equipment :

L: WK 3260B or WK 6500P, 100kHz 0.25V RDC: CHEN HWA 502 or CHEN HWA 46502B

Irms: CHROMA 1810







## **Electrical Characteristics**

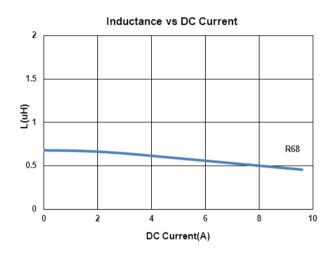
| Part Number        | Inductance<br>(uH) | Tolerance<br>(±%) | Test<br>Frequency<br>(kHz) | RDC(m $\Omega$ )<br>Max(Typ.) | Isat(A)<br>Max(Typ.) | Irms(A)<br>Max(Typ.) | Marking |
|--------------------|--------------------|-------------------|----------------------------|-------------------------------|----------------------|----------------------|---------|
| BMMN00050512R68MX2 | 0.68               | 20                | 100                        | 22(19)                        | 7.4(8.5)             | 6.0(6.7)             | R68     |

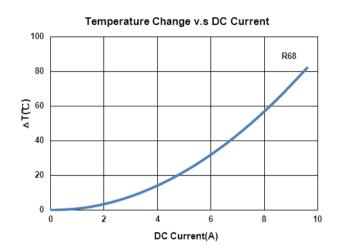
#### Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- Operating temperature range  $-55^{\circ}\text{C} \sim 125^{\circ}\text{C}$  (Including self temperature rise)
- Isat for Inductance drop 30% from its value without current
- Irms for a 40<sup>o</sup> temperature rise from 25<sup>o</sup> 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







## **Electrical Characteristics**

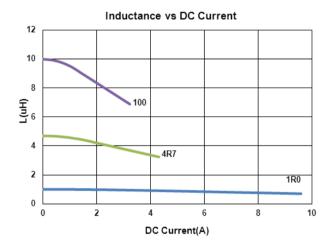
| Part Number        | Inductance<br>(uH) | Tolerance<br>(±%) | Test<br>Frequency<br>(kHz) | RDC(m $\Omega$ )<br>Max(Typ.) | Isat<br>(A)Typ. | Irms<br>(A)Typ | Marking |
|--------------------|--------------------|-------------------|----------------------------|-------------------------------|-----------------|----------------|---------|
| BMMN000505151R0MX2 | 1.0                | 20                | 100                        | 23(20)                        | 9               | 6.5            | 1R0     |
| BMMN000505154R7MX2 | 4.7                | 20                | 100                        | 106(95)                       | 4               | 3              | 4R7     |
| BMMN00050515100MX2 | 10                 | 20                | 100                        | 170(153)                      | 3               | 2              | 100     |

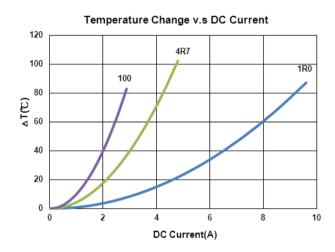
Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- Operating temperature range  $-55^{\circ}$ C  $\sim$  125 $^{\circ}$ C (Including self temperature rise)
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- 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







## **Electrical Characteristics**

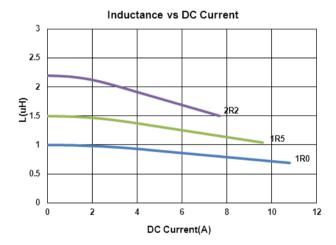
| Part Number        | Inductance<br>(uH) | Tolerance<br>(±%) | Test<br>Frequency<br>(kHz) | RDC(m $\Omega$ )<br>Max(Typ.) | Isat(A)<br>Max(Typ.) | Irms(A)<br>Max(Typ.) | Marking |
|--------------------|--------------------|-------------------|----------------------------|-------------------------------|----------------------|----------------------|---------|
| BMMN000505181R0MX1 | 1.0                | 20                | 100                        | 18(15)                        | 8.6(10)              | 7.5(8.5)             | 1R0     |
| BMMN000505181R5MX1 | 1.5                | 20                | 100                        | 28(23)                        | 7.2(9)               | 5.5(6.5)             | 1R5     |
| BMMN000505182R2MX1 | 2.2                | 20                | 100                        | 35(30)                        | 6(7)                 | 4.7(5.2)             | 2R2     |

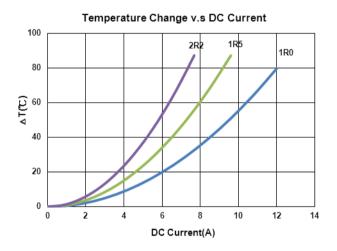
Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- Operating temperature range  $-55^{\circ}$ C  $\sim$  125 $^{\circ}$ 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







## **Electrical Characteristics**

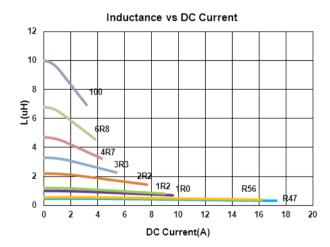
| Part Number        | Inductance<br>(uH) | Tolerance<br>(±%) | Test<br>Frequency<br>(kHz) | RDC(m $\Omega$ )<br>Max(Typ.) | Isat<br>(A)Typ. | Irms<br>(A)Typ. | Marking |
|--------------------|--------------------|-------------------|----------------------------|-------------------------------|-----------------|-----------------|---------|
| BMMN00050518R47MX2 | 0.47               | 20                | 100                        | 9(7.7)                        | 15.5            | 10.5            | R47     |
| BMMN00050518R56MX2 | 0.56               | 20                | 100                        | 10(8)                         | 15              | 9.5             | R56     |
| BMMN000505181R0MX2 | 1.0                | 20                | 100                        | 17(15)                        | 9               | 8               | 1R0     |
| BMMN000505181R2MX2 | 1.2                | 20                | 100                        | 20(17)                        | 8               | 7.5             | 1R2     |
| BMMN000505182R2MX2 | 2.2                | 20                | 100                        | 35(30)                        | 6.5             | 5               | 2R2     |
| BMMN000505183R3MX2 | 3.3                | 20                | 100                        | 58(52)                        | 5               | 4.5             | 3R3     |
| BMMN000505184R7MX2 | 4.7                | 20                | 100                        | 85(78)                        | 4               | 3.5             | 4R7     |
| BMMN000505186R8MX2 | 6.8                | 20                | 100                        | 120(107)                      | 3.4             | 2.8             | 6R8     |
| BMMN00050518100MX2 | 10                 | 20                | 100                        | 155(140)                      | 3               | 2.5             | 100     |

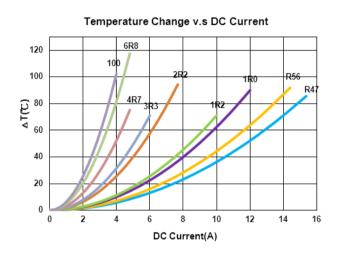
## Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- Operating temperature range −55°C ~125°C (Including self temperature rise)
- Isat for Inductance drop 30% from its value without current
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- Measure Equipment :

L: WK 3260B or WK 6500P, 100kHz 0.25V RDC: CHEN HWA 502 or CHEN HWA 46502B

Irms: CHROMA 1810









## **Electrical Characteristics**

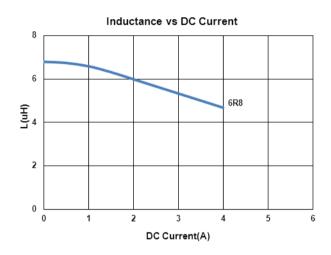
| Part Number        | Inductance<br>(uH) | Tolerance<br>(±%) | Test<br>Frequency<br>(kHz) | RDC(m $\Omega$ )<br>Max(Typ.) | Isat(A)<br>Max(Typ.) | Irms(A)<br>Max(Typ.) | Marking |
|--------------------|--------------------|-------------------|----------------------------|-------------------------------|----------------------|----------------------|---------|
| BMMN000505306R8MX1 | 6.8                | 20                | 100                        | 115(100)                      | 3.2(3.7)             | 3(3.5)               | 6R8     |

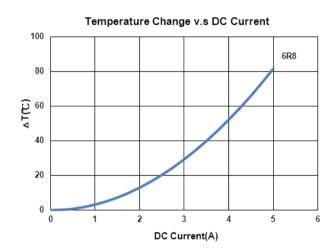
#### Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- Operating temperature range  $-55^{\circ}\text{C} \sim 125^{\circ}\text{C}$  (Including self temperature rise)
- Isat for Inductance drop 30% from its value without current
- Irms for a 40<sup>o</sup>C temperature rise from 25<sup>o</sup>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







## **Electrical Characteristics**

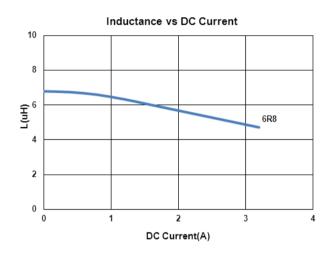
| Part Number        | Inductance<br>(uH) | Tolerance<br>(±%) | Test<br>Frequency<br>(kHz) | RDC(m $\Omega$ )<br>Max(Typ.) | Isat<br>(A)Typ. | Irms<br>(A)Typ. | Marking |
|--------------------|--------------------|-------------------|----------------------------|-------------------------------|-----------------|-----------------|---------|
| BMMN000505306R8MX2 | 6.8                | 20                | 100                        | 100(96)                       | 3               | 3               | 6R8     |

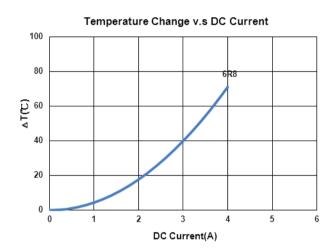
#### Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- Operating temperature range  $-55^{\circ}$ C  $\sim$  125 $^{\circ}$ 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







## **Electrical Characteristics**

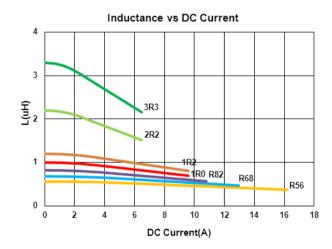
| Part Number        | Inductance<br>(uH) | Tolerance<br>(±%) | Test<br>Frequency<br>(kHz) | RDC(m $\Omega$ ) Max(Typ.) | Isat<br>(A)Typ. | Irms<br>(A)Typ. | Marking |
|--------------------|--------------------|-------------------|----------------------------|----------------------------|-----------------|-----------------|---------|
| BMMN00060615R56MX2 | 0.56               | 20                | 100                        | 11(9.5)                    | 14              | 9               | R56     |
| BMMN00060615R68MX2 | 0.68               | 20                | 100                        | 12(10.5)                   | 12              | 8.5             | R68     |
| BMMN00060615R82MX2 | 0.82               | 20                | 100                        | 17(15)                     | 10              | 7               | R82     |
| BMMN000606151R0MX2 | 1.0                | 20                | 100                        | 21(18.5)                   | 9               | 5.5             | 1R0     |
| BMMN000606151R2MX2 | 1.2                | 20                | 100                        | 30(25)                     | 8.5             | 5.4             | 1R2     |
| BMMN000606152R2MX2 | 2.2                | 20                | 100                        | 50(43)                     | 6               | 3.5             | 2R2     |
| BMMN000606153R3MX2 | 3.3                | 20                | 100                        | 63(54)                     | 5.5             | 3.3             | 3R3     |

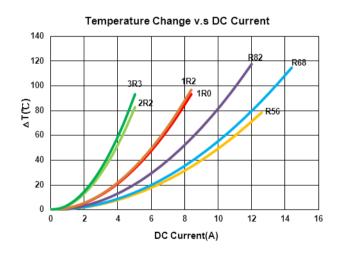
## Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- 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<sup>o</sup>C temperature rise from 25<sup>o</sup>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









## **Electrical Characteristics**

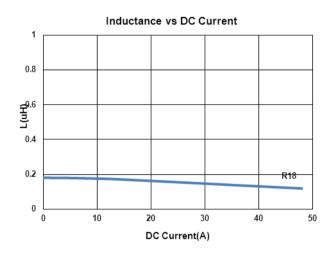
| Part Number        | Inductance<br>(uH) | Tolerance<br>(±%) | Test<br>Frequency<br>(kHz) | RDC(m $\Omega$ )<br>Max(Typ.) | Isat(A)<br>Max(Typ.) | Irms(A)<br>Max(Typ.) | Marking |
|--------------------|--------------------|-------------------|----------------------------|-------------------------------|----------------------|----------------------|---------|
| BMMN00060618R18MX2 | 0.18               | 20                | 100                        | 3.6(3.1)                      | 35(41)               | 17(20)               | R18     |

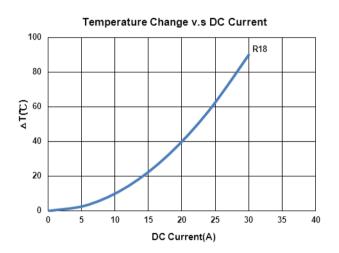
#### Note: When ordering, please specify tolerance code. Tolerance: M=±20%

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Irms: CHROMA 1810









## **Electrical Characteristics**

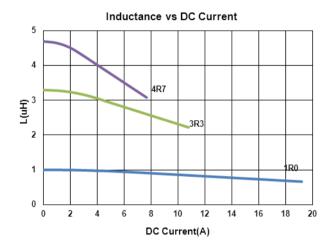
| Part Number        | Inductance<br>(uH) | Tolerance<br>(±%) | Test<br>Frequency<br>(kHz) | RDC(m $\Omega$ )<br>Max(Typ.) | Isat(A)<br>Max(Typ.) | Irms(A)<br>Max(Typ.) | Marking |
|--------------------|--------------------|-------------------|----------------------------|-------------------------------|----------------------|----------------------|---------|
| BMMN000606301R0MX1 | 1.0                | 20                | 100                        | 7.25(6.6)                     | 13.5(16.5)           | 11.2(13)             | 1R0     |
| BMMN000606303R3MX1 | 3.3                | 20                | 100                        | 22(17.9)                      | 8.5(9.6)             | 6.2(7.2)             | 3R3     |
| BMMN000606304R7MX1 | 4.7                | 20                | 100                        | 33(27.9)                      | 5.5(6.55)            | 5.5(6.0)             | 4R7     |

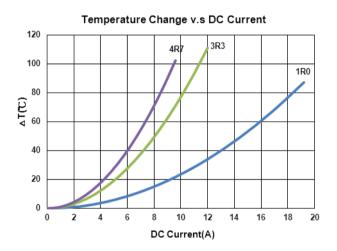
Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- Operating temperature range  $-55^{\circ}$ C  $\sim$  125 $^{\circ}$ 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









## **Electrical Characteristics**

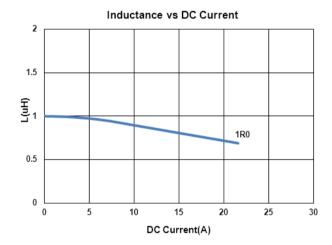
| Part Number        | Inductance<br>(uH) | Tolerance<br>(±%) | Test<br>Frequency<br>(kHz) | RDC(m $\Omega$ )<br>Max(Typ.) | Isat(A)<br>Max(Typ.) | Irms(A)<br>Max(Typ.) | Marking |
|--------------------|--------------------|-------------------|----------------------------|-------------------------------|----------------------|----------------------|---------|
| BMMN001010201R0MX2 | 1.0                | 20                | 100                        | 10.4(9.0)                     | 16(20)               | 11(12)               | 1R0     |

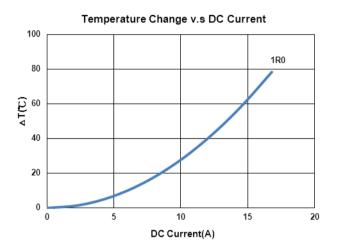
## Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- Operating temperature range −55°C ~125°C (Including self temperature rise)
- Isat for Inductance drop 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







## **Electrical Characteristics**

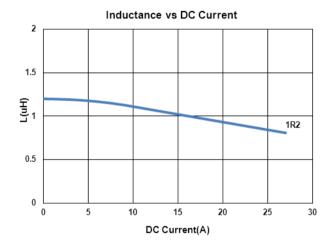
| Part Number        | Inductance<br>(uH) | Tolerance<br>(±%) | Test<br>Frequency<br>(kHz) | RDC(m $\Omega$ )<br>Max(Typ.) | Isat(A)<br>Max(Typ.) | Irms(A)<br>Max(Typ.) | Marking |
|--------------------|--------------------|-------------------|----------------------------|-------------------------------|----------------------|----------------------|---------|
| BMMN001010301R2MX1 | 1.2                | 20                | 100                        | 15.2(12.5)                    | 20(24)               | 9.5(10.5)            | 1R2     |

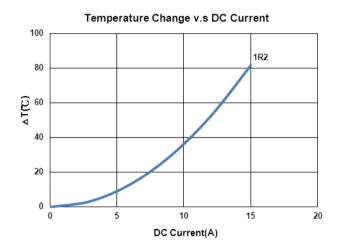
## Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- 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<sup>o</sup> temperature rise from 25<sup>o</sup> 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







## **Electrical Characteristics**

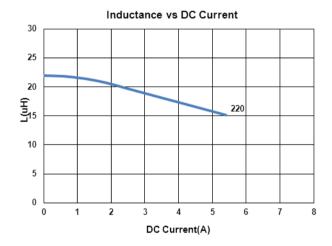
| Part Number        | Inductance<br>(uH) | Tolerance<br>(±%) | Test<br>Frequency<br>(kHz) | RDC(m $\Omega$ ) Max(Typ.) | Isat<br>(A)Typ. | Irms<br>(A)Typ. | Marking |
|--------------------|--------------------|-------------------|----------------------------|----------------------------|-----------------|-----------------|---------|
| BMMN00101030220MX2 | 22                 | 20                | 100                        | 99(90)                     | 5.0             | 3.0             | 220     |

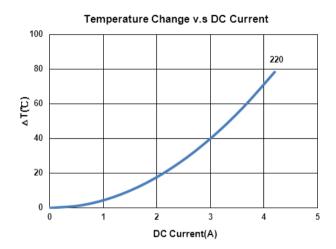
## Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- 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<sup>o</sup> temperature rise from 25<sup>o</sup> 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







## **Electrical Characteristics**

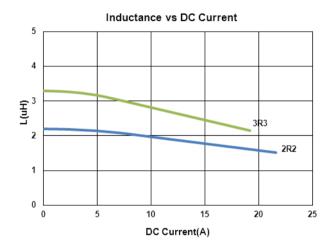
| Part Number        | Inductance<br>(uH) | Tolerance<br>(±%) | Test<br>Frequency<br>(kHz) | RDC(mΩ)<br>Max(Typ.) | Isat(A)<br>Max(Typ.) | Irms(A)<br>Max(Typ.) | Marking |
|--------------------|--------------------|-------------------|----------------------------|----------------------|----------------------|----------------------|---------|
| BMMN001010402R2MX1 | 2.2                | 20                | 100                        | 7(6)                 | 16(20)               | 11(12)               | 2R2     |
| BMMN001010403R3MX1 | 3.3                | 20                | 100                        | 12(10.5)             | 14(16.2)             | 9(10)                | 3R3     |

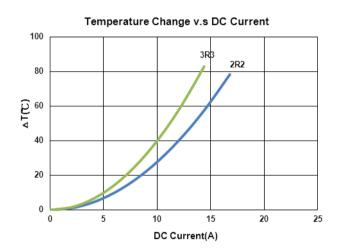
#### Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- Operating temperature range  $-55^{\circ}$ C  $\sim 125^{\circ}$ C (Including self temperature rise)
- Isat for Inductance drop 30% from its value without current
- Irms for a 40  $^{\circ}\!\mathbb{C}$  temperature rise from 25  $^{\circ}\!\mathbb{C}$  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









## **Electrical Characteristics**

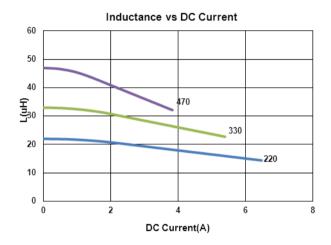
| Part Number        | Inductance<br>(uH) | Tolerance<br>(±%) | Test<br>Frequency<br>(kHz) | RDC(m $\Omega$ ) Max(Typ.) | Isat<br>(A)Typ. | Irms<br>(A)Typ. | Marking |
|--------------------|--------------------|-------------------|----------------------------|----------------------------|-----------------|-----------------|---------|
| BMMN00101040220MX2 | 22                 | 20                | 100                        | 66(60)                     | 5.5             | 5.0             | 220     |
| BMMN00101040330MX2 | 33                 | 20                | 100                        | 92(85)                     | 5.0             | 4.4             | 330     |
| BMMN00101040470MX2 | 47                 | 20                | 100                        | 145(130)                   | 3.5             | 3.3             | 470     |

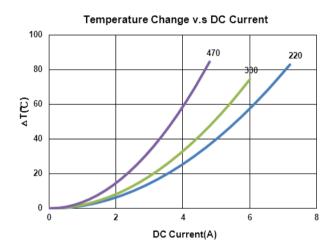
Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- Operating temperature range  $-55^{\circ}$ C  $\sim 125^{\circ}$ 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







## **Electrical Characteristics**

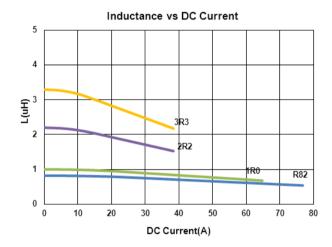
| Part Number        | Inductance<br>(uH) | Tolerance<br>(±%) | Test<br>Frequency<br>(kHz) | RDC(m $\Omega$ )<br>Max(Typ.) | Isat(A)<br>Max(Typ.) | Irms(A)<br>Max(Typ.) | Marking |
|--------------------|--------------------|-------------------|----------------------------|-------------------------------|----------------------|----------------------|---------|
| BMMN00131350R82MX1 | 0.82               | 20                | 100                        | 2.0(1.7)                      | 55(65)               | 28(31)               | R82     |
| BMMN001313501R0MX1 | 1.0                | 20                | 100                        | 2.5(2.05)                     | 50(58)               | 26(29)               | 1R0     |
| BMMN001313502R2MX1 | 2.2                | 20                | 100                        | 5.2(4.5)                      | 32(36)               | 19(20)               | 2R2     |
| BMMN001313503R3MX1 | 3.3                | 20                | 100                        | 8.6(7.5)                      | 28(33)               | 14(15)               | 3R3     |

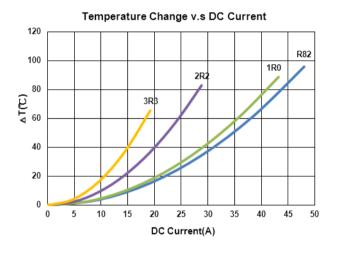
#### Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- 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









## **Electrical Characteristics**

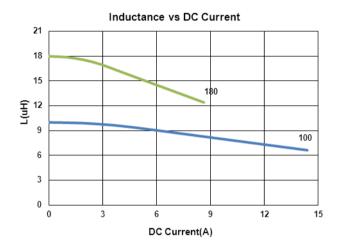
| Part Number        | Inductance<br>(uH) | Tolerance<br>(±%) | Test<br>Frequency<br>(kHz) | RDC(m $\Omega$ ) Max(Typ.) | Isat<br>(A)Typ. | Irms<br>(A)Typ. | Marking |
|--------------------|--------------------|-------------------|----------------------------|----------------------------|-----------------|-----------------|---------|
| BMMN00131360100MX2 | 10                 | 20                | 100                        | 20.7(18)                   | 12.5            | 10              | 100     |
| BMMN00131360180MX2 | 18                 | 20                | 100                        | 35(30)                     | 8               | 5               | 180     |

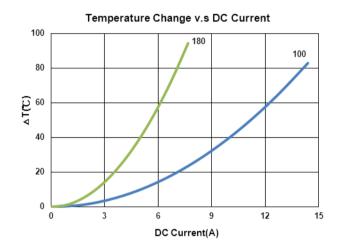
## Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- Operating temperature range  $-55^{\circ}$ C  $\sim 125^{\circ}$ 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









## **Electrical Characteristics**

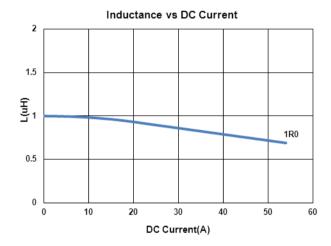
| Part Number        | Inductance<br>(uH) | Tolerance<br>(±%) | Test<br>Frequency<br>(kHz) | RDC(m $\Omega$ ) Max(Typ.) | Isat<br>(A)Typ. | Irms<br>(A)Typ. | Marking |
|--------------------|--------------------|-------------------|----------------------------|----------------------------|-----------------|-----------------|---------|
| BMMN001313651R0MX2 | 1.0                | 20                | 100                        | 2.3(1.9)                   | 50              | 28              | 1R0     |

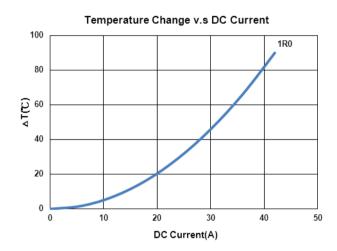
## Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- Operating temperature range −55°C ~125°C (Including self temperature rise)
- Isat for Inductance drop 30% from its value without current
- Irms for a 40<sup>o</sup> temperature rise from 25<sup>o</sup> 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







## **Electrical Characteristics**

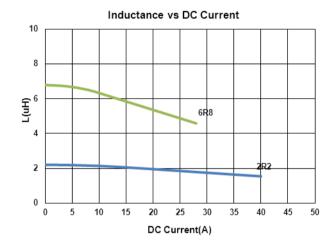
| Part Number        | Inductance Toleran<br>(uH) (±%) |    | Test<br>Frequency<br>(kHz) | RDC(m $\Omega$ )<br>Max(Typ.) | Isat(A)<br>Max(Typ.) | Irms(A)<br>Max(Typ.) | Marking |  |
|--------------------|---------------------------------|----|----------------------------|-------------------------------|----------------------|----------------------|---------|--|
| BMMN001717702R2MX1 | 2.2                             | 20 | 100                        | 2.5(2.1)                      | 33(38)               | 30(37)               | 2R2     |  |
| BMMN001717706R8MX1 | 6.8                             | 20 | 100                        | 7.5(6.5)                      | 22(25)               | 19(21)               | 6R8     |  |

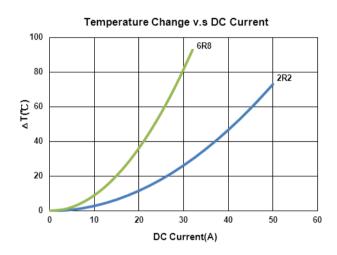
## Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- Operating temperature range  $-55^{\circ}$ C  $\sim 125^{\circ}$ C (Including self temperature rise)
- Isat for Inductance drop 30% from its value without current
- Irms for a 40<sup>o</sup>C temperature rise from 25<sup>o</sup>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







## **Electrical Characteristics**

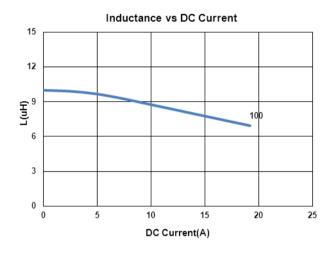
| Part Number        | Inductance<br>(uH) | Tolerance<br>(±%) | Test<br>Frequency<br>(kHz) | RDC(m $\Omega$ )<br>Max(Typ.) | Isat<br>(A)Typ. | Irms<br>(A)Typ. | Marking |
|--------------------|--------------------|-------------------|----------------------------|-------------------------------|-----------------|-----------------|---------|
| BMMN00171770100MX2 | 10                 | 20                | 100                        | 10(9.3)                       | 18              | 14              | 100     |

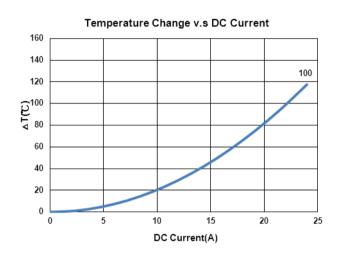
#### Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- Operating temperature range  $-55^{\circ}$ C  $\sim$  125 $^{\circ}$ C (Including self temperature rise)
- Isat for Inductance drop 30% from its value without current
- Irms for a 40<sup>o</sup>C temperature rise from 25<sup>o</sup>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



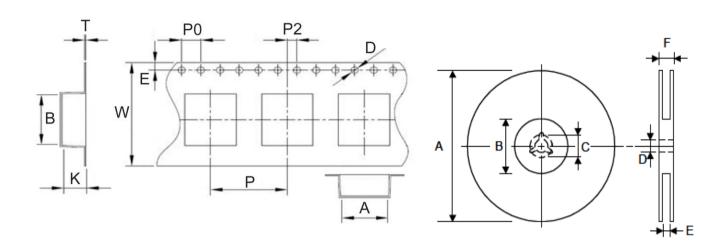




## **Packaging Specifications**

**Tape Dimensions** 

## **Reel Dimensions**



#### Dimensions in mm

| TVDF         | Tape Dimensions |      |      |      |     |      |    |    |    | Reel Dimensions |     |     |      |    | Quantity |      |            |
|--------------|-----------------|------|------|------|-----|------|----|----|----|-----------------|-----|-----|------|----|----------|------|------------|
| TYPE         | Α               | В    | K    | Т    | D   | E    | W  | Р  | P0 | P2              | Α   | В   | С    | D  | E        | F    | PCS / REEL |
| BMMN00040412 | 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       |
| BMMN00040420 | 4.5             | 4.9  | 2.4  | 0.35 | 1.5 | 1.75 | 12 | 8  | 4  | 2               | 330 | 100 | 21.5 | 13 | 12.4     | 17.4 | 2000       |
| BMMN00050512 | 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       |
| BMMN00050515 | 5.4             | 5.8  | 1.95 | 0.3  | 1.5 | 1.75 | 12 | 8  | 4  | 2               | 330 | 100 | 21.5 | 13 | 12.4     | 17.4 | 1000       |
| BMMN00050518 | 5.4             | 5.8  | 1.95 | 0.3  | 1.5 | 1.75 | 12 | 8  | 4  | 2               | 330 | 100 | 21.5 | 13 | 12.4     | 17.4 | 1000       |
| BMMN00050530 | 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       |
| BMMN00060615 | 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       |
| BMMN00060618 | 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       |
| BMMN00060630 | 6.9             | 7.6  | 3.4  | 0.35 | 1.5 | 1.75 | 16 | 12 | 4  | 2               | 330 | 100 | 21.5 | 13 | 16.4     | 21.4 | 1000       |
| BMMN00101020 | 10.4            | 11.5 | 2.8  | 0.35 | 1.5 | 1.75 | 24 | 16 | 4  | 2               | 330 | 100 | 21.5 | 13 | 24.2     | 29.2 | 500        |
| BMMN00101030 | 10.4            | 11.5 | 3.4  | 0.35 | 1.5 | 1.75 | 24 | 16 | 4  | 2               | 330 | 100 | 21.5 | 13 | 24.2     | 29.2 | 500        |
| BMMN00101040 | 10.4            | 11.5 | 4.5  | 0.35 | 1.5 | 1.75 | 24 | 16 | 4  | 2               | 330 | 100 | 21.5 | 13 | 24.2     | 29.2 | 500        |
| BMMN00131350 | 13.4            | 14   | 5.4  | 0.4  | 1.5 | 1.75 | 24 | 16 | 4  | 2               | 330 | 100 | 21.5 | 13 | 24.2     | 29.2 | 250        |
| BMMN00131360 | 13.2            | 14.4 | 6.3  | 0.4  | 1.5 | 1.75 | 24 | 16 | 4  | 2               | 330 | 100 | 21.5 | 13 | 24.2     | 29.2 | 250        |
| BMMN00131365 | 13.4            | 14.1 | 6.8  | 0.4  | 1.5 | 1.75 | 24 | 16 | 4  | 2               | 330 | 100 | 21.5 | 13 | 24.2     | 29.2 | 250        |
| BMMN00171770 | 17.45           | 18.5 | 7.8  | 0.5  | 1.5 | 1.75 | 32 | 24 | 4  | 2               | 330 | 100 | 21.5 | 13 | 32       | 37   | 100        |



