

Power Inductor AMRx Series

**Automotive
AEC-Q200**

RoHS Compliant
Halogen Free
REACH Compliant



- Power Circuit
- Shield
- Wire Wound
- Metal
- Ultra High Current

Part Numbering

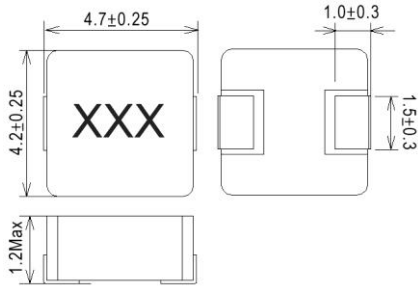
| A | MRU | 00 | 040420 | 1R0 | M | A1 |
|-------|-------------|--------------|----------------------|-----------------|-----------|---------------|
| Grade | Series Name | Control Code | Dimensions Code (mm) | Inductance (uH) | Tolerance | Internal Code |
| | | | 040412 4.2x4.7x1.2 | R22 0.22 | M ±20% | |
| | | | 040420 4.2x4.7x1.8 | 1R0 1.0 | | |
| | | | 060630 6.8x7.3x2.8 | 3R3 3.3 | | |
| | | | 101040 10.2x11.6x3.8 | | | |
| | | | 131365 12.8x13.8x6.5 | | | |

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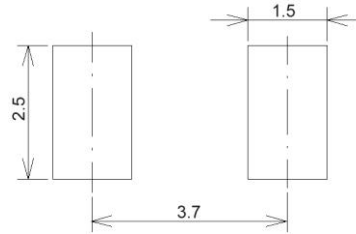
AMRU00040412 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

| Part No. | Inductance (uH) | Test Freq. | RDC(mΩ) Max(Typ) | Isat (A)Typ. | Irms (A)Typ. | Tolerance (±%) | Marking |
|--------------------|-----------------|-------------|------------------|--------------|--------------|----------------|---------|
| AMRU00040412R22MA1 | 0.22 | 100kHz/0.5V | 12(11) | 15 | 8.5 | 20 | R22 |
| AMRU00040412R47MA1 | 0.47 | 100kHz/0.5V | 20(18) | 9 | 5 | 20 | R47 |
| AMRU000404121R0MA1 | 1.0 | 100kHz/0.5V | 43(39) | 6 | 4 | 20 | 1R0 |

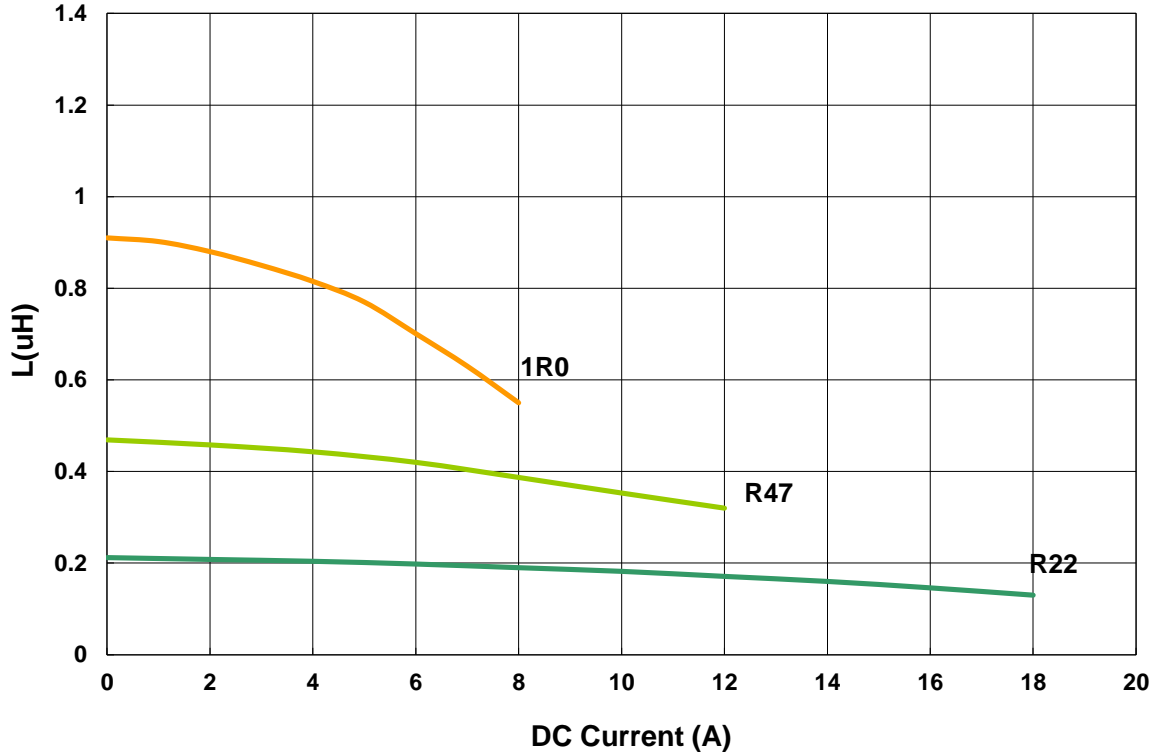
Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- Operating temperature range - 40°C ~ 125°C
- Isat for Inductance drop 30% from its value without current
- Irms for a 40°C temprature rise from 25°C ambient with current
- Absolute maximum voltage 30VDC
- Measure Equipment:
 L: WK3260B or WK6500P
 RDC: CHEN HWA502 or 16502
 Isat: WK3260B+WK3265B
 Irms: CHROMA 1810

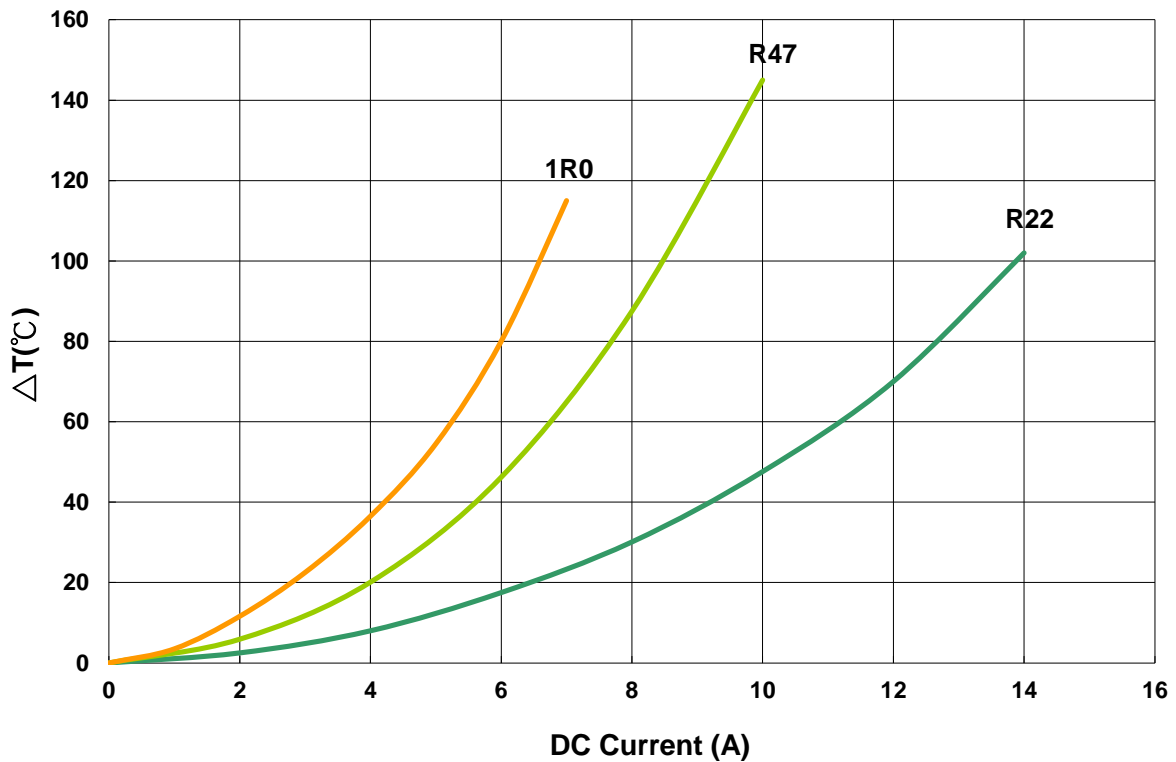
AMRU00040412 Type

■ Characteristics Graph

Inductance vs. DC Current



Temperature Change vs. DC Current

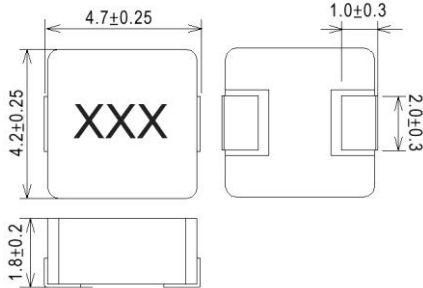


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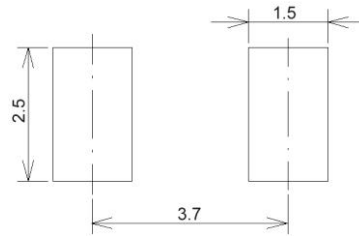
AMRU00040420 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

| Part No. | Inductance (uH) | Test Freq. | RDC(mΩ) Max(Typ) | Isat (A)Typ. | Irms (A)Typ. | Tolerance (±%) | Marking |
|--------------------|-----------------|-------------|------------------|--------------|--------------|----------------|---------|
| AMRU00040420R47MB1 | 0.47 | 100kHz/0.5V | 14(12) | 10 | 7 | 20 | R47 |
| AMRU000404201R0MB1 | 1 | 100kHz/0.5V | 27(24) | 7 | 4.5 | 20 | 1R0 |
| AMRU000404201R5MB1 | 1.5 | 100kHz/0.5V | 46(38) | 6 | 4 | 20 | 1R5 |
| AMRU000404202R2MB1 | 2.2 | 100kHz/0.5V | 55(50) | 5 | 3 | 20 | 2R2 |
| AMRU000404204R7MB1 | 4.7 | 100kHz/0.5V | 105(95) | 3.5 | 2.2 | 20 | 4R7 |

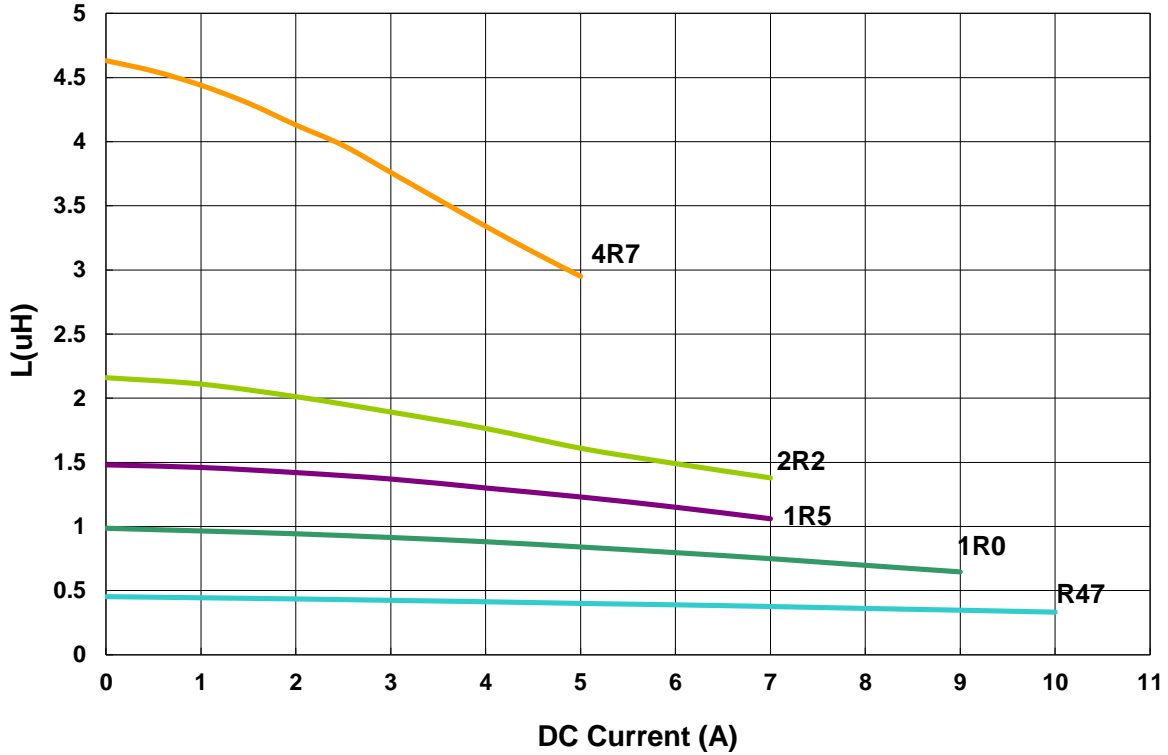
Note: When ordering, please specify tolerance code. Tolerance: M=±20%

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5. Measure Equipment:
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 Isat: WK3260B+WK3265B
 I rms: CHROMA 1810

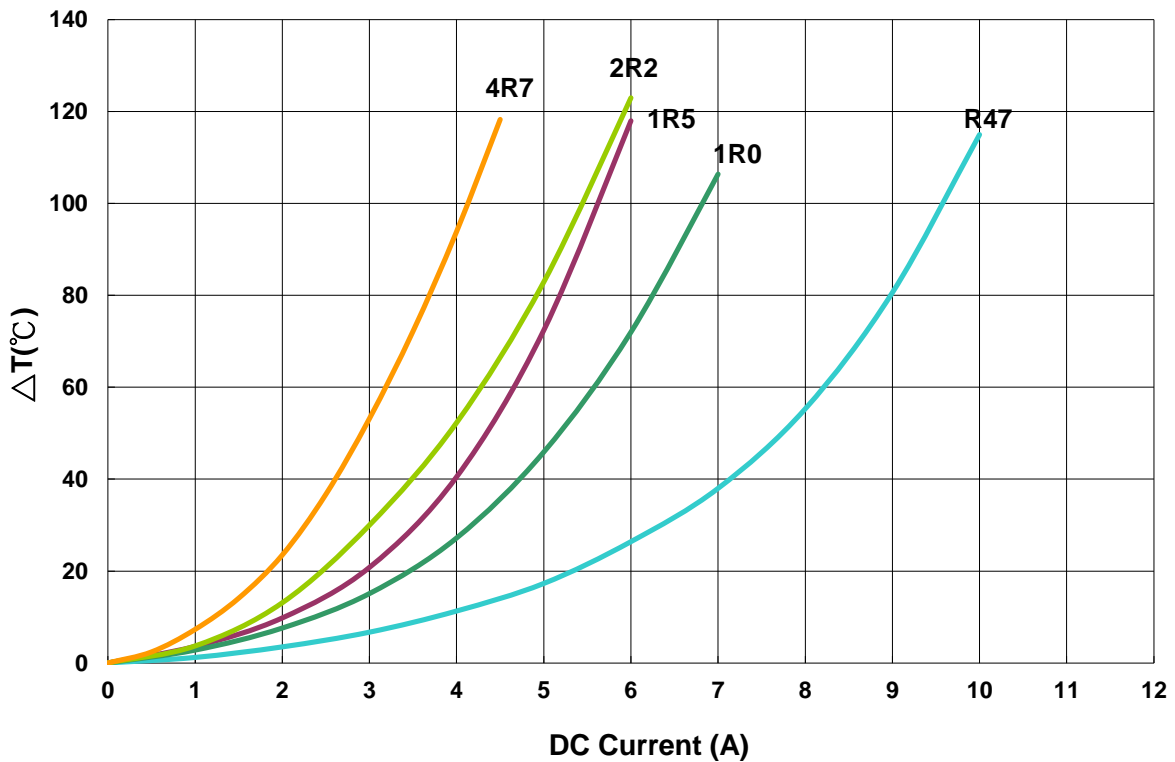
AMRU00040420 Type

■ Characteristics Graph

Inductance vs. DC Current



Temperature Change vs. DC Current

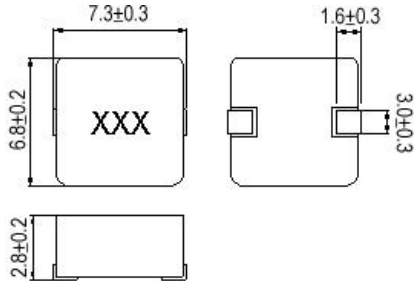


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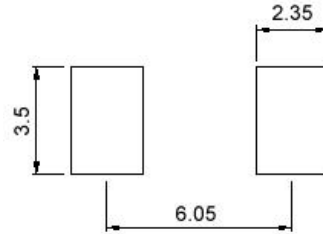
AMRU00060630 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

| Part No. | Inductance (uH) | Test Freq. | RDC(mΩ) Max(Typ) | Isat (A)Typ. | Irms (A)Typ. | Tolerance (±%) | Marking |
|--------------------|-----------------|-------------|------------------|--------------|--------------|----------------|---------|
| AMRU00060630R47MA1 | 0.47 | 100kHz,0.5V | 4.3(3.9) | 20 | 16.5 | 20 | R47 |
| AMRU000606301R0MA1 | 1 | 100kHz,0.5V | 10(9) | 18 | 10 | 20 | 1R0 |
| AMRU000606301R5MA1 | 1.5 | 100kHz,0.5V | 14(13) | 13 | 9 | 20 | 1R5 |
| AMRU000606302R2MA1 | 2.2 | 100kHz,0.5V | 20(18) | 10 | 8 | 20 | 2R2 |
| AMRU000606303R3MA1 | 3.3 | 100kHz,0.5V | 28(25) | 9 | 6.5 | 20 | 3R3 |
| AMRU000606304R7MA1 | 4.7 | 100kHz,0.5V | 40(35) | 8 | 5.5 | 20 | 4R7 |
| AMRU000606305R6MA1 | 5.6 | 100kHz,0.5V | 45(38) | 7 | 5 | 20 | 5R6 |
| AMRU000606306R8MA1 | 6.8 | 100kHz,0.5V | 49.5(45) | 6 | 4.5 | 20 | 6R8 |
| AMRU000606308R2MA1 | 8.2 | 100kHz,0.5V | 55(50) | 5.2 | 4.3 | 20 | 8R2 |
| AMRU00060630100MA1 | 10 | 100kHz,0.5V | 68(62) | 5 | 4 | 20 | 100 |

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

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4. Absolute maximum voltage 30VDC
5. Measure Equipment:
 L: WK3260B or WK6500P
 RDC: CHEN HWA502 or 16502
 Isat: WK3260B+WK3265B
 I rms: CHROMA 1810

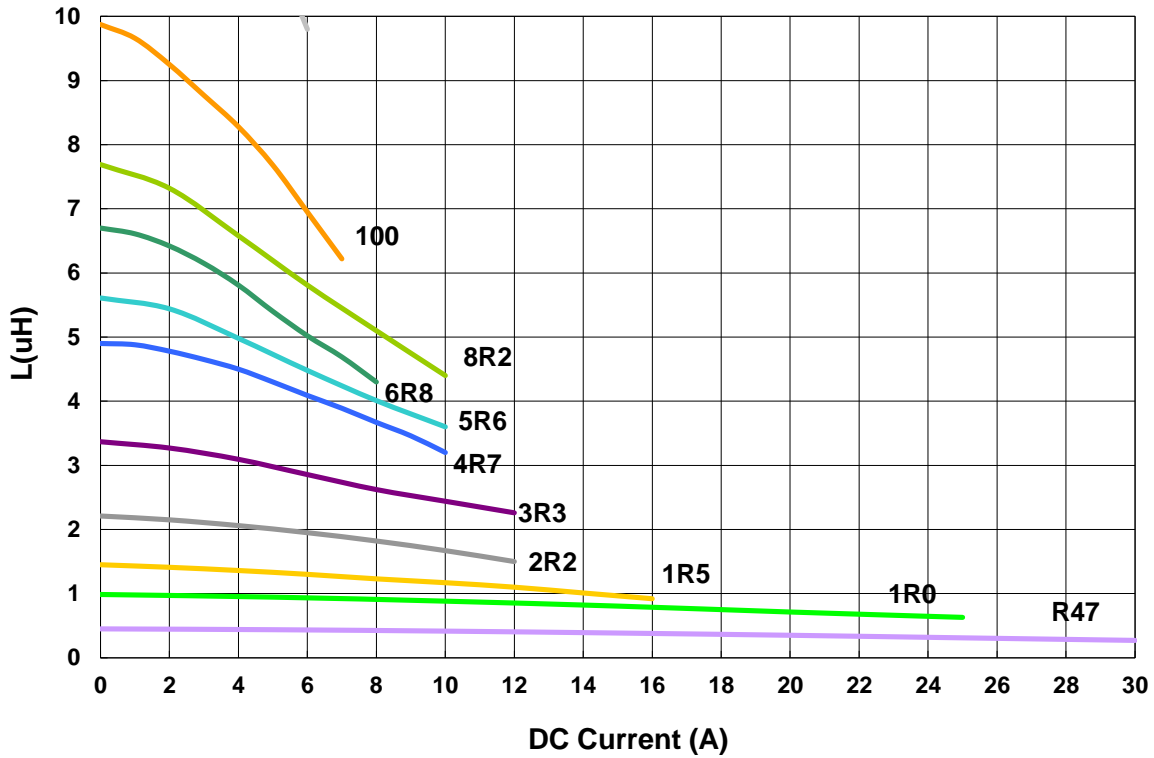
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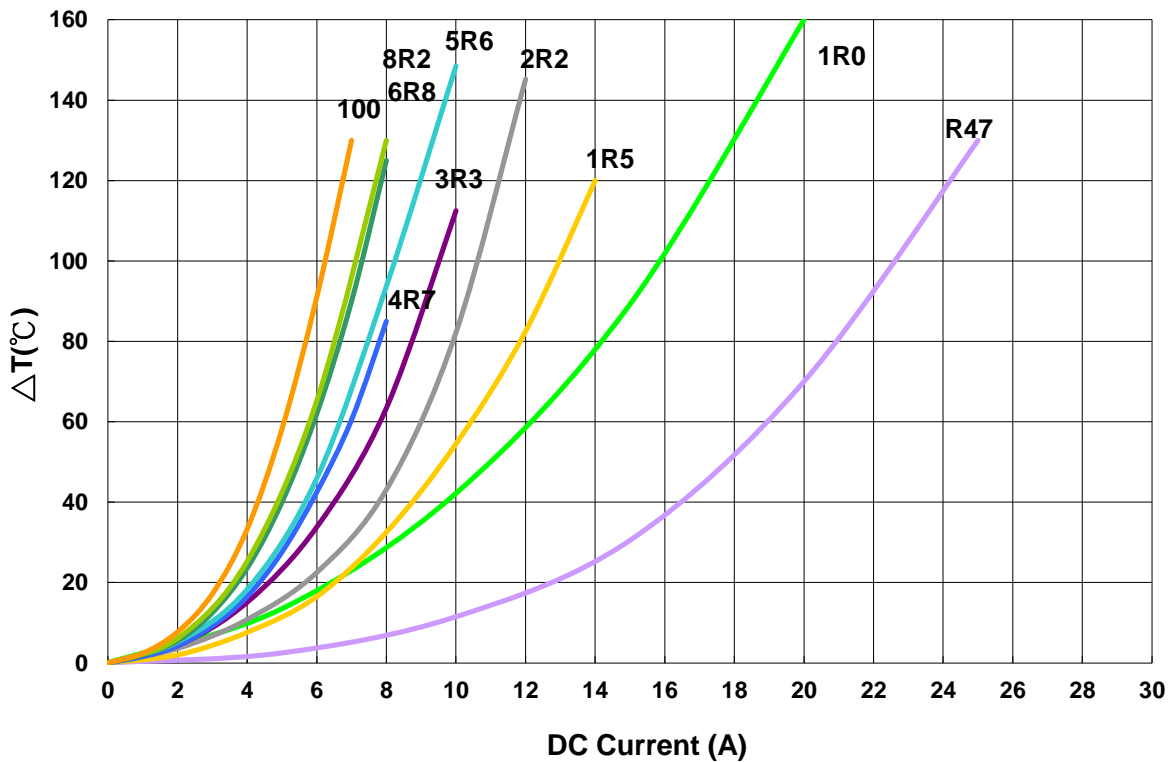
AMRU00060630 Type

Characteristics Graph

Inductance vs. DC Current



Temperature Change vs. DC Current



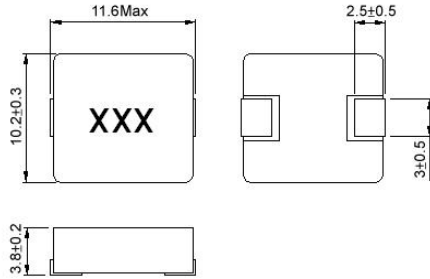
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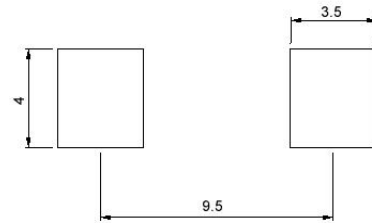
AMRU00101040 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

| Part No. | Inductance (uH) | Test Freq. | RDC(mΩ) Max(Typ) | Isat (A)Typ. | Irms (A)Typ. | Tolerance (±%) | Marking |
|--------------------|-----------------|-------------|------------------|--------------|--------------|----------------|---------|
| AMRU001010401R0MA1 | 1 | 100kHz/0.5V | 3.3(3.0) | 20 | 18 | 20 | 1R0 |
| AMRU001010402R2MA1 | 2.2 | 100kHz/0.5V | 6.8(6.0) | 16 | 14 | 20 | 2R2 |
| AMRU001010403R3MA1 | 3.3 | 100kHz/0.5V | 11(10) | 13 | 11 | 20 | 3R3 |
| AMRU001010404R7MA1 | 4.7 | 100kHz/0.5V | 16(14.5) | 11 | 9 | 20 | 47R |
| AMRU001010406R8MA1 | 6.8 | 100kHz/0.5V | 24(20) | 9 | 8 | 20 | 6R8 |
| AMRU00101040100MA1 | 10 | 100kHz/0.5V | 30(27) | 7 | 6.5 | 20 | 100 |

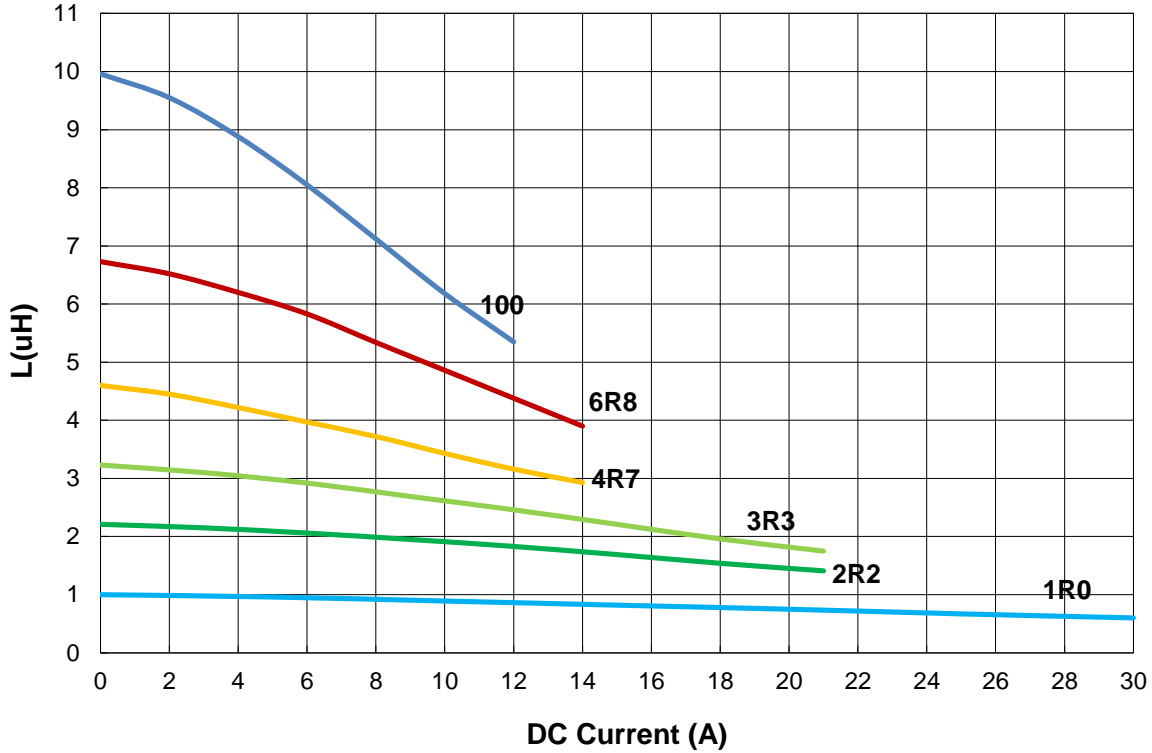
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5. Measure Equipment:
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 RDC: CHEN HWA502 or 16502
 Isat: WK3260B+WK3265B
 Iirms: CHROMA 1810

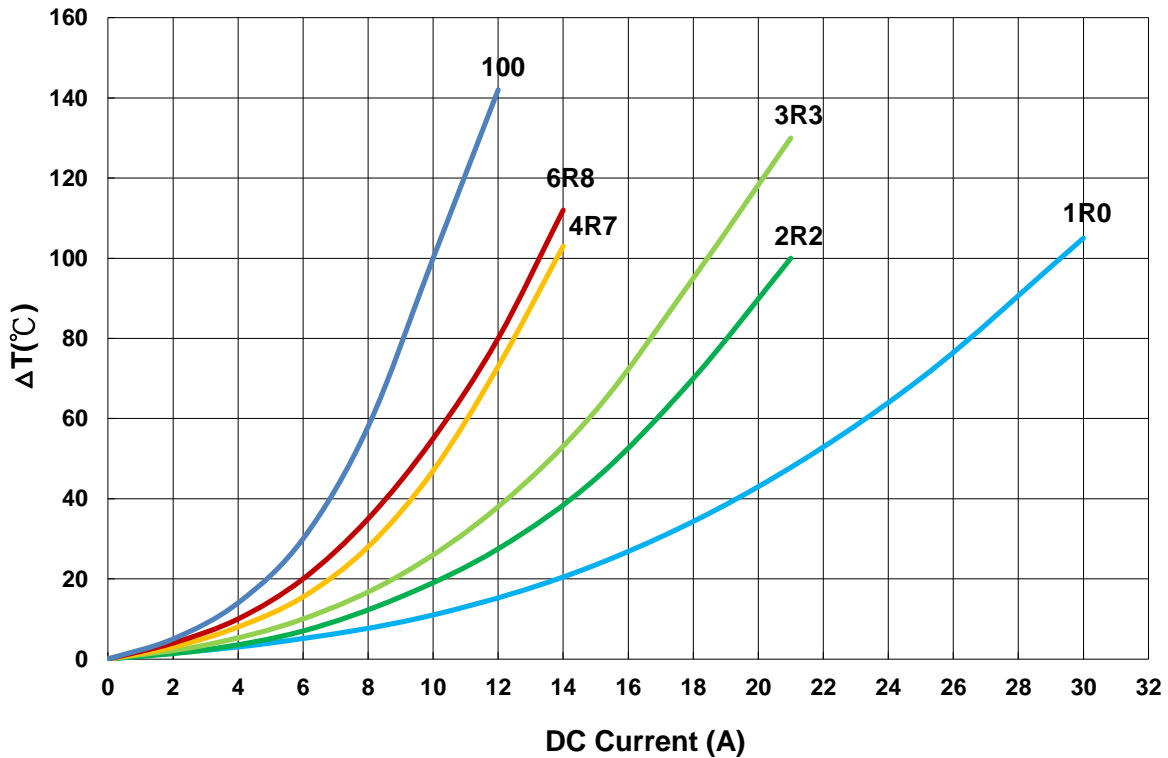
AMRU00101040 Type

■ Characteristics Graph

Inductance vs. DC Current



Temperature Change vs. DC Current

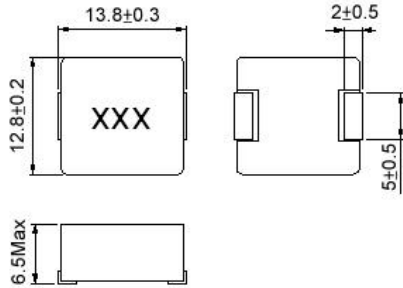


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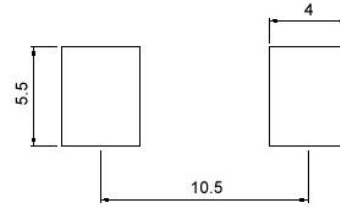
AMRU00131365 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

| Part No. | Inductance (uH) | Test Freq. | RDC(mΩ) Max(Typ) | Isat (A)Typ. | Irms (A)Typ. | Tolerance (±%) | Marking |
|--------------------|-----------------|-------------|------------------|--------------|--------------|----------------|---------|
| AMRU001313651R0MA1 | 1 | 100kHz/0.5V | 2.1(1.9) | 30 | 28 | 20 | 1R0 |
| AMRU001313651R5MA1 | 1.5 | 100kHz/0.5V | 3.0(2.7) | 28 | 23 | 20 | 1R5 |
| AMRU001313652R2MA1 | 2.2 | 100kHz/0.5V | 4.4(3.7) | 25 | 18 | 20 | 2R2 |
| AMRU001313653R3MA1 | 3.3 | 100kHz/0.5V | 6.8(5.7) | 22 | 16 | 20 | 3R3 |
| AMRU001313654R7MA1 | 4.7 | 100kHz/0.5V | 7.7(7.0) | 18 | 14 | 20 | 4R7 |
| AMRU00131365100MA1 | 10 | 100kHz/0.5V | 18(16.5) | 12 | 10 | 20 | 100 |
| AMRU00131365220MA1 | 22 | 100kHz/0.5V | 40(35) | 7 | 6 | 20 | 220 |
| AMRU00131365330MA1 | 33 | 100kHz/0.5V | 55(50) | 6 | 5 | 20 | 330 |

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 Isat: WK3260B+WK3265B
 Iirms: CHROMA 1810

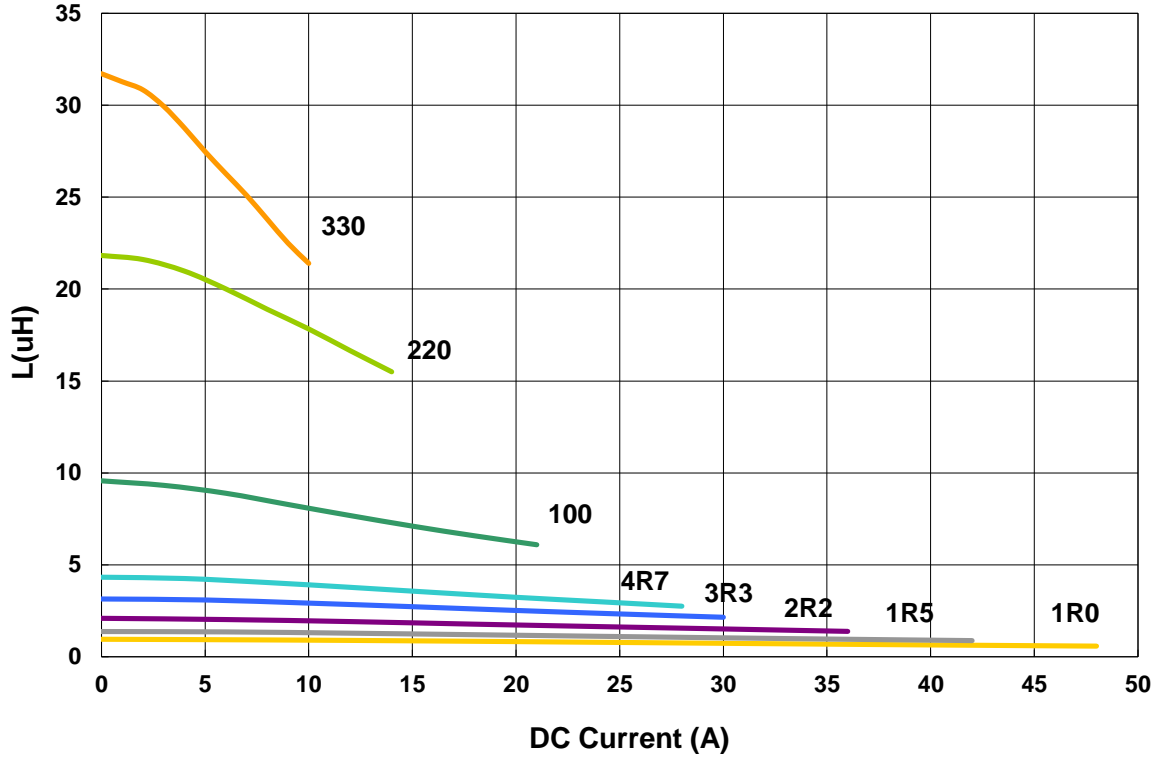
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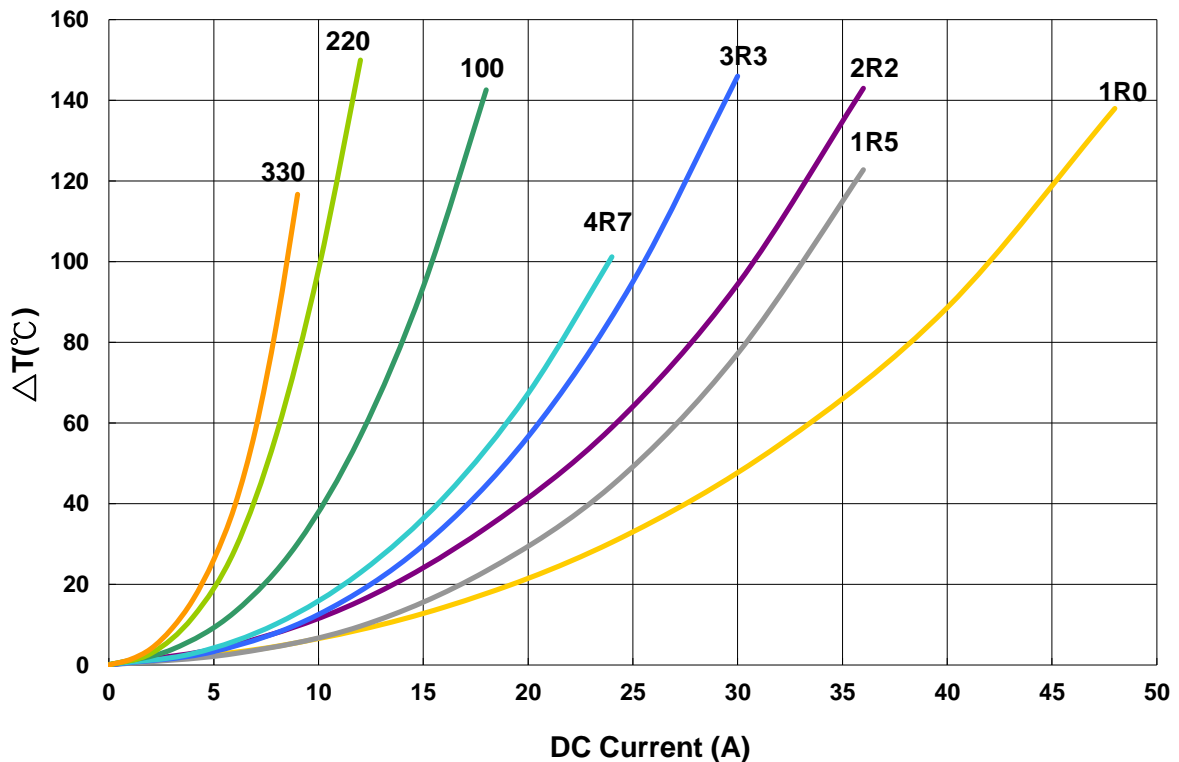
AMRU00131365 Type

Characteristics Graph

Inductance vs. DC Current



Temperature Change vs. DC Current



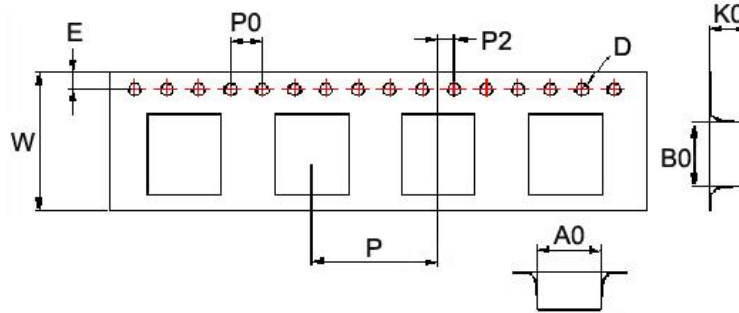
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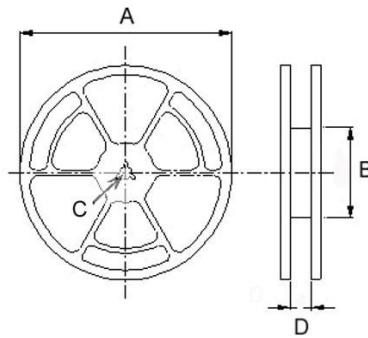
**Automotive
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■ Packaging

Tape Dimensions



Reel Dimensions



Dimensions in mm

| TYPE | Tape Dimensions | | | | | | | | | Reel Dimensions | | | | Quantity |
|--------------|-----------------|------|------|------|------|----|----|----|----|-----------------|-----|----|------|------------|
| | A0 | B0 | K0 | D | E | W | P | P0 | P2 | A | B | C | D | PCS / REEL |
| AMRU00040412 | 4.4 | 4.9 | 1.5 | 1.55 | 1.75 | 12 | 8 | 4 | 2 | 330 | 100 | 13 | 13.4 | 2000 |
| AMRU00040420 | 4.3 | 4.9 | 2.4 | 1.55 | 1.75 | 12 | 8 | 4 | 2 | 330 | 100 | 13 | 13.4 | 2000 |
| AMRU00060630 | 7.1 | 7.6 | 3.4 | 1.55 | 1.75 | 16 | 12 | 4 | 2 | 330 | 100 | 13 | 16 | 1000 |
| AMRU00101040 | 10.6 | 11.7 | 4.25 | 1.55 | 1.75 | 24 | 16 | 4 | 2 | 330 | 100 | 13 | 24.4 | 500 |
| AMRU00131365 | 13.1 | 14.6 | 6.75 | 1.55 | 1.75 | 24 | 16 | 4 | 2 | 330 | 100 | 13 | 24.4 | 500 |

单击下面可查看定价，库存，交付和生命周期等信息

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