

Power Inductor AMQx Series

**Automotive
AEC-Q200**

RoHS Compliant
Halogen Free
REACH Compliant



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

Part Numbering

A	MQU	00	060603	100	M	A1
Grade	Series Name	Control Code	Dimensions Code (mm)	Inductance (uH)	Tolerance	
			060630 6.8*7.3*2.8	1R0 1	M ±20%	
			101040 10.2*11.6*3.8	2R2 2.2		
				100 10		

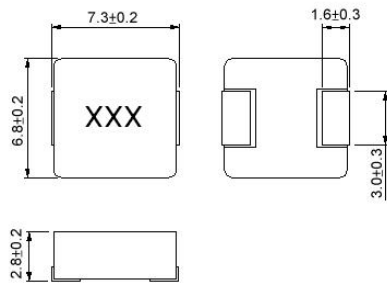
This specification applies to Power Inductors for Automotive Electronics based on AEC-Q200 except for Power train and Safety.

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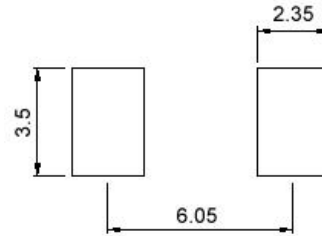
AMQU00060630 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC(mΩ) Max.(Typ)	Isat(A) Max.(Typ)	Irms(A) Typ.	Tolerance (±%)	Marking
AMQU000606301R0MA1	1	100kHz,0.5V	9.5(8.5)	16(18)	12	20	1R0
AMQU000606301R5MA1	1.5	100kHz,0.5V	14(12.7)	14(16)	10	20	1R5
AMQU000606302R2MA1	2.2	100kHz,0.5V	18.7(17)	11(12)	8	20	2R2
AMQU000606303R3MA1	3.3	100kHz,0.5V	27.5(25)	8.0(9.0)	7	20	3R3
AMQU000606304R7MA1	4.7	100kHz,0.5V	39(35)	7.0(8.0)	6	20	4R7
AMQU000606306R8MA1	6.8	100kHz,0.5V	49(45)	5.5(6.5)	5.5	20	6R8
AMQU00060630100MA1	10	100kHz,0.5V	66(60)	4.8(5.5)	4	20	100

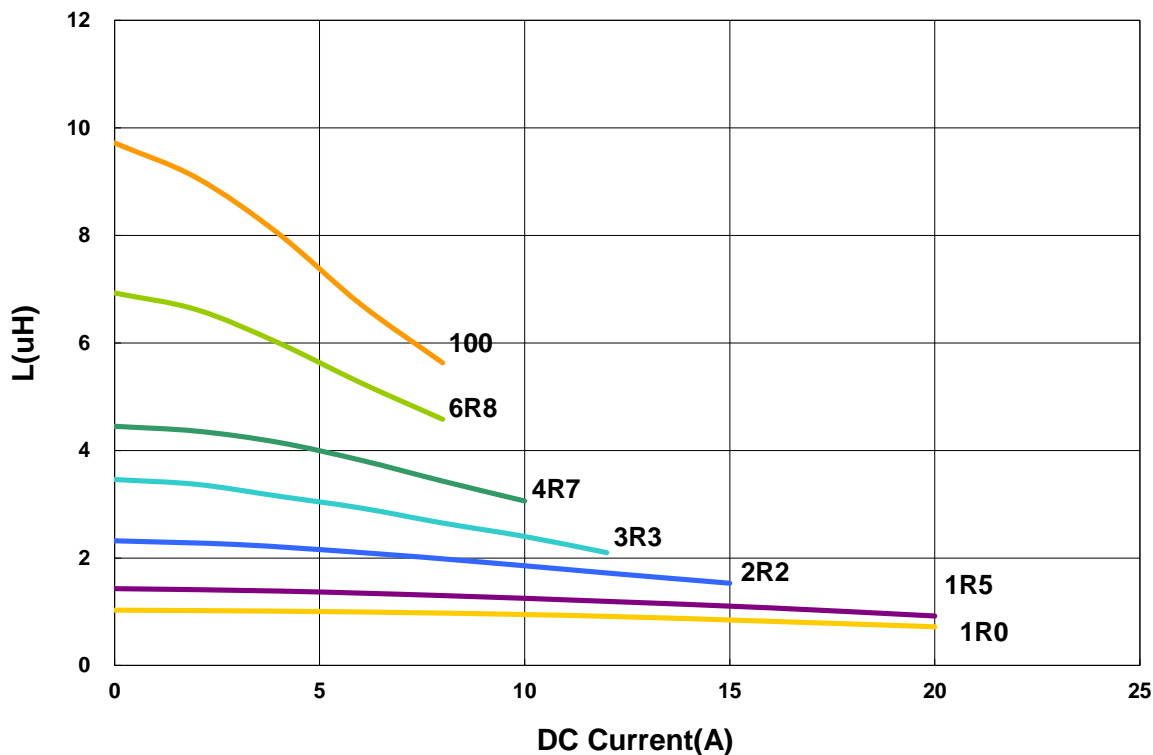
Note: When ordering, please specify tolerance code. Tolerance: M=±20%

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

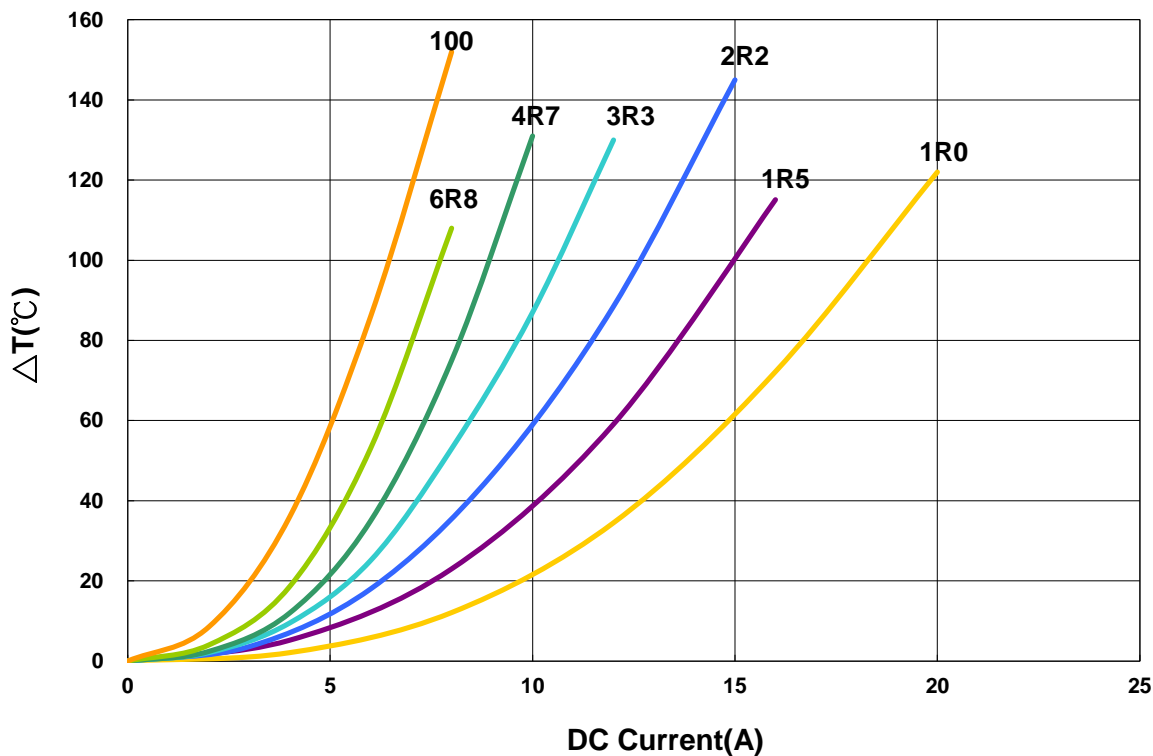
AMQU00060630 Type

■ Characteristics Graph

Inductance vs. DC Current



Temperature Change vs. DC Current

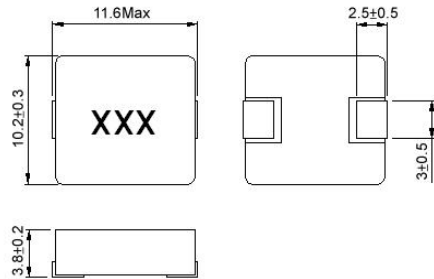


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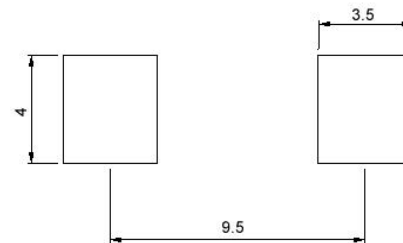
AMQU00101040 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

Part No.	Inductance (uH)	Test Freq.	RDC(mΩ) Max.(Typ)	Isat(A) Max.(Typ)	Irms(A) Typ.	Tolerance (±%)	Marking
AMQU001010401R0MA1	1	100kHz,0.5V	3.3(3.0)	20(24)	18	20	1R0
AMQU001010402R2MA1	2.2	100kHz,0.5V	6.5(5.9)	16(19)	14	20	2R2
AMQU001010403R3MA1	3.3	100kHz,0.5V	10.5(9.5)	13(16)	11	20	3R3
AMQU001010404R7MA1	4.7	100kHz,0.5V	15.5(14)	11(13.5)	9	20	4R7
AMQU001010406R8MA1	6.8	100kHz,0.5V	23(20)	9(12)	8	20	6R8
AMQU00101040100MA1	10	100kHz,0.5V	27(25)	6.5(8)	7	20	100

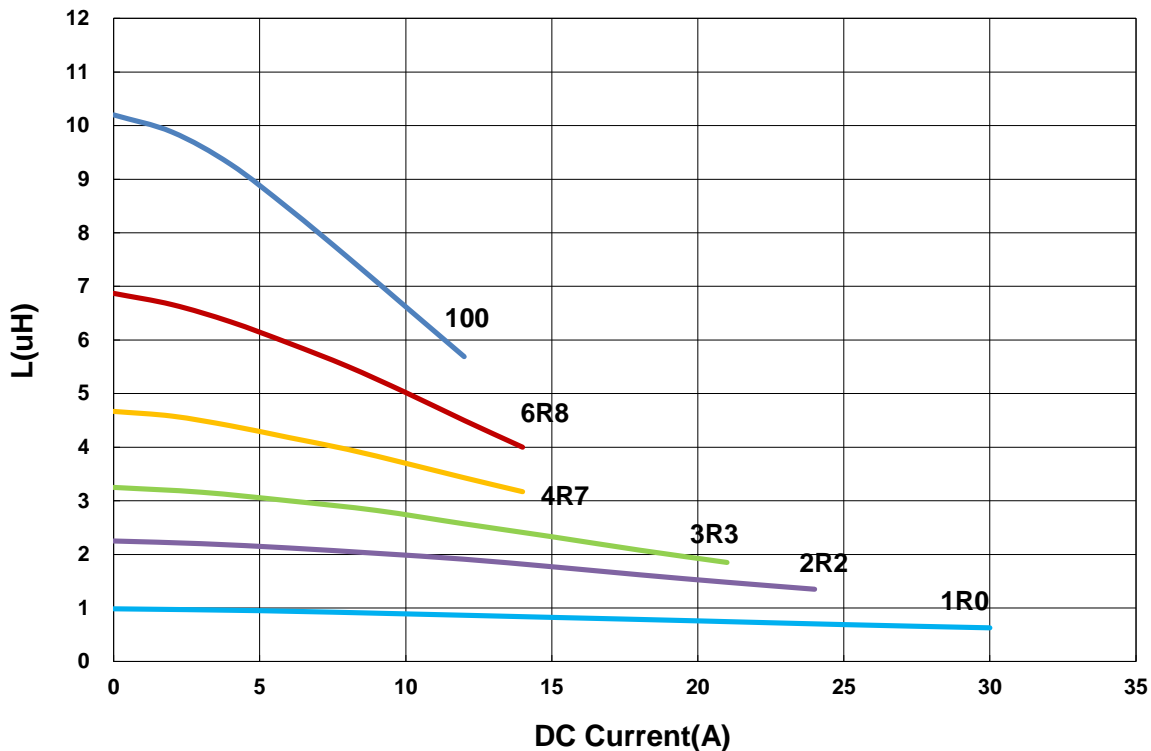
Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- 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

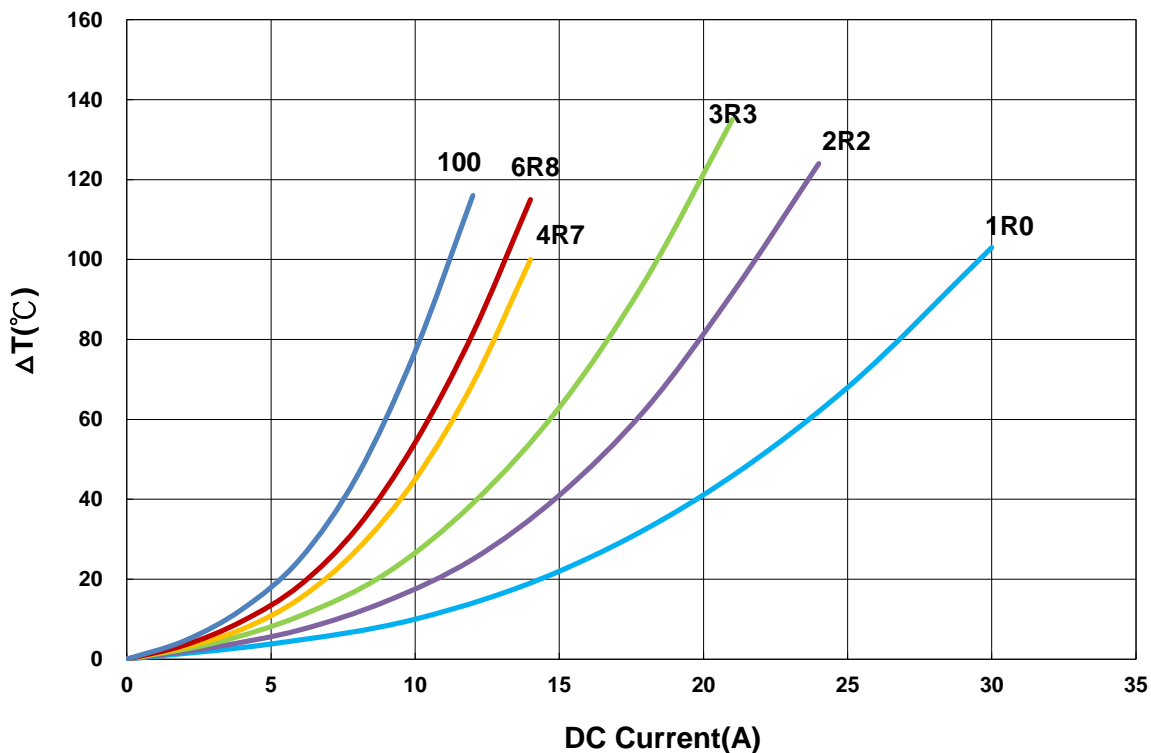
AMQU00101040 Type

■ Characteristics Graph

Inductance vs. DC Current



Temperature Change vs. DC Current

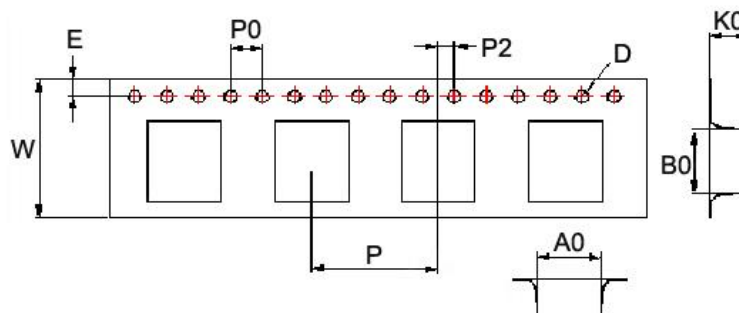


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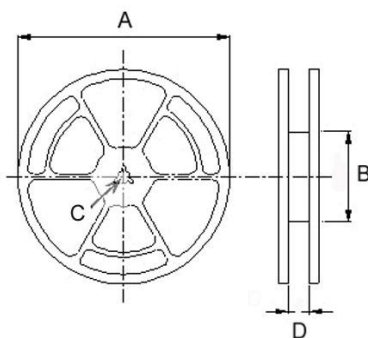
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■ Packaging

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
AMQU00060630	7.1	7.6	3.4	1.55	1.75	16	12	4	2	330	100	13	16	1000
AMQU00101040	10.6	11.7	4.25	1.55	1.75	24	16	4	2	330	100	13	24.4	500