

## BMQx Series



BMQx series is low profile molding power choke with low RDC and high Q factor, so the efficiency performance is also superior. 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.

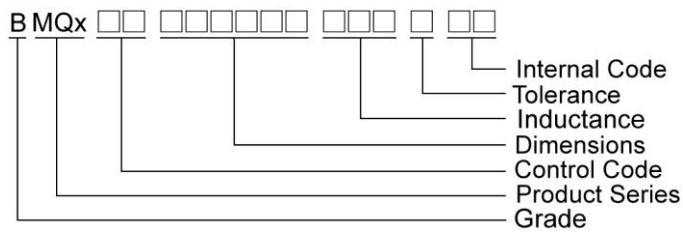
### Features

- RoHS, Halogen Free and REACH Compliance
- Low RDC
- High Q
- High Efficiency
- Ultra-low buzz noise

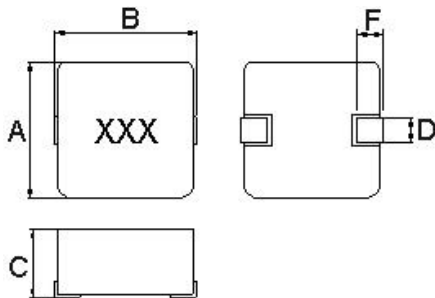
### Applications

- Laptops and PCs
- Switches and servers
- Base stations
- DC/DC converters

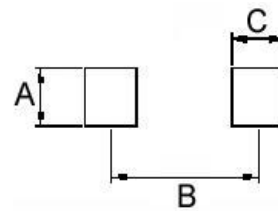
### Product Identification



### Shape and Dimensions



### Recommended Pattern



Dimensions in mm

TYPE	A	B	C	D	F
BMQE00040410	4.1±0.2	4.6±0.2	1.0Max	1.5±0.3	1.0±0.3
BMQE00040411	4.1±0.2	4.6±0.2	1.1Max	1.5±0.3	1.0±0.3
BMQE00050511	5.5±0.2	5.7±0.2	1.1Max	2.0±0.3	1.5±0.3
BMQE00060611	6.6±0.2	6.95±0.35	1.1Max	3.0±0.3	1.6±0.3

Dimensions in mm

TYPE	A	B	C
BMQE00040410	2.5	3.7	1.5
BMQE00040411	2.5	3.7	1.5
BMQE00050511	2.5	4.1	1.9
BMQE00060611	3.5	6.05	2.35

# Molding Power Inductors – BMQx Series

## Electrical Characteristics

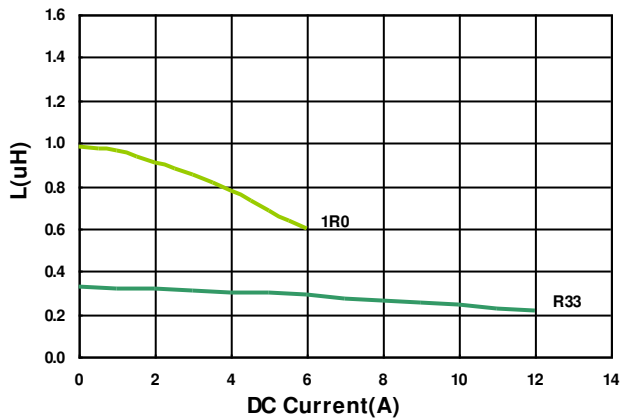
Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (kHz)	RDC(mΩ) Max(Typ.)	Isat(A) Max(Typ.)	Irms(A) Max(Typ.)	Marking
BMQE00040410R33MAA	0.33	20	100	14(12)	9.0(11)	6.0(7.0)	R33
BMQE000404101R0MAA	1.0	20	100	43(39)	4.0(5.0)	4.0(4.5)	1R0

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

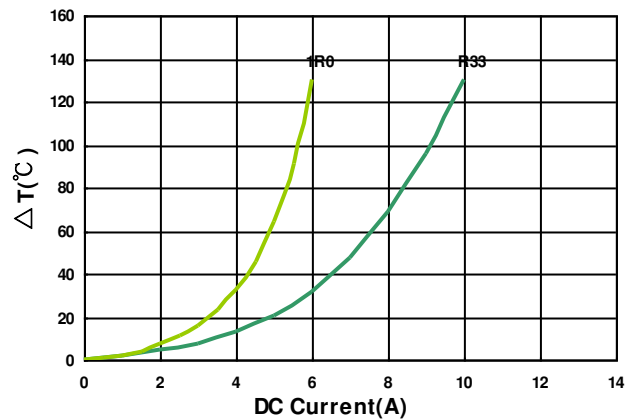
- Operating temperature range –55°C ~ 125°C (Including self - temperature rise)
- Isat for Inductance drop 30% from its value without current
- Irms for a 40°C temperature rise from 25°C ambient with current
- Absolute maximum voltage 30VDC
- Measure Equipment :  
 L : WK 3260B or WK 6500P, 100kHz 0.5V  
 RDC : CHEN HWA 502 or CHEN HWA 46502B  
 Irms : CHROMA 1810

**Test Instruments :** WK3260B Impedance / Material Analyzer

**Inductance v.s DC Current**



**Temperature Change v.s DC Current**



# Molding Power Inductors – BMQx Series

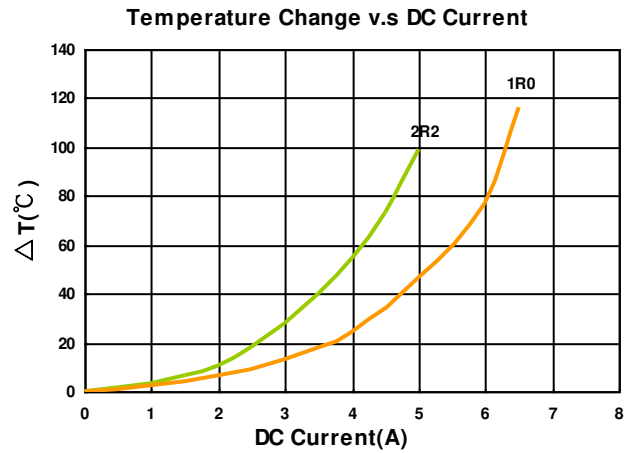
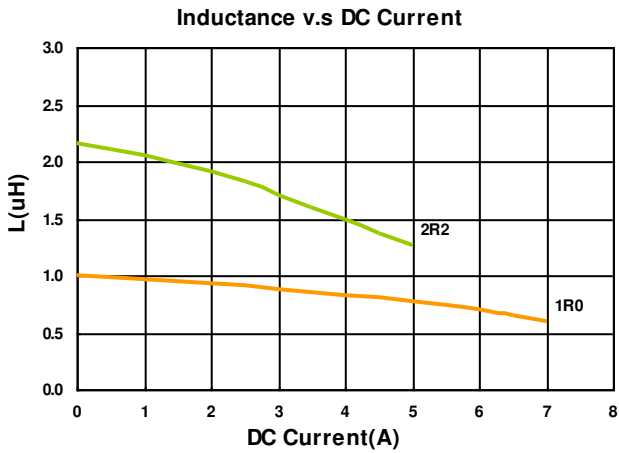
## Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (kHz)	RDC(mΩ) Max(Typ.)	Isat(A) Max(Typ.)	Irms(A) Max(Typ.)	Marking
BMQE000404111R0MAA	1.0	20	100	38.5(35)	5.4(6.0)	4.3(4.8)	1R0
BMQE000404112R2MAA	2.2	20	100	82(75)	3.5(4.0)	3.0(3.3)	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
- Absolute maximum voltage 30VDC
- Measure Equipment :  
 L : WK 3260B or WK 6500P, 100kHz 0.5V  
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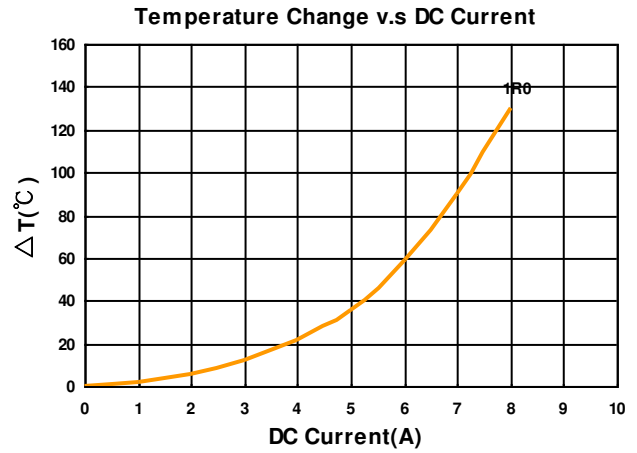
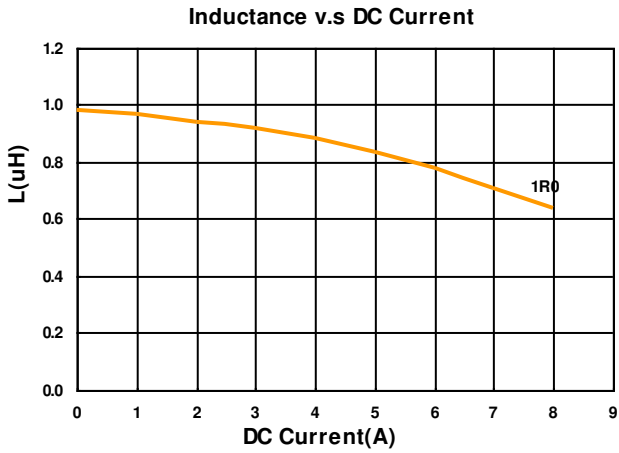
## Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (kHz)	RDC(mΩ) Max(Typ.)	Isat(A) Max(Typ.)	Irms(A) Max(Typ.)	Marking
BMQE000505111R0MAA	1.0	20	100	33(30)	7.0(7.5)	4.8(5.3)	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
- I rms for a 40°C temperature rise from 25°C ambient with current
- Absolute maximum voltage 30VDC
- Measure Equipment :  
 L : WK 3260B or WK 6500P, 100kHz 0.5V  
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 I rms : CHROMA 1810

**Test Instruments :** WK3260B Impedance / Material Analyzer



# Molding Power Inductors – BMQx Series

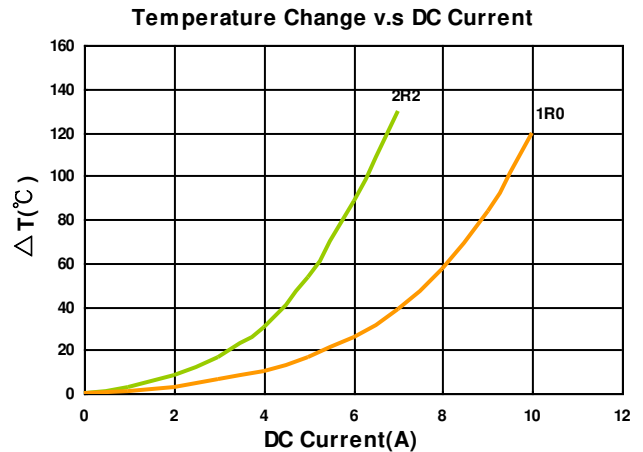
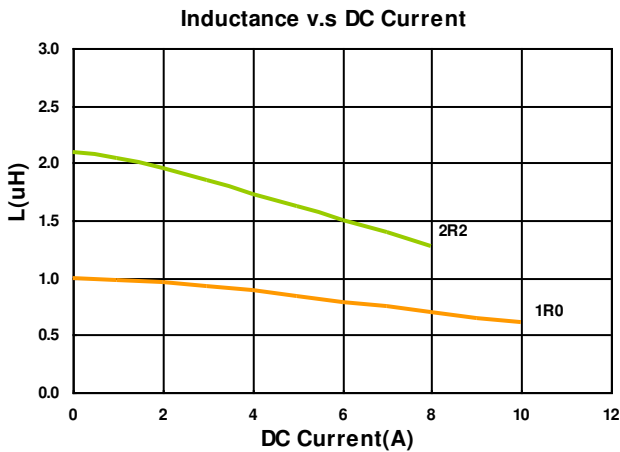
## Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (kHz)	RDC(mΩ) Max(Typ.)	Isat(A) Max(Typ.)	Irms(A) Max(Typ.)	Marking
BMQE000606111R0MAA	1.0	20	100	26(24.5)	7.0(7.8)	6.8(7.3)	1R0
BMQE000606112R2MAA	2.2	20	100	57(52)	5.0(6.0)	4.2(4.6)	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
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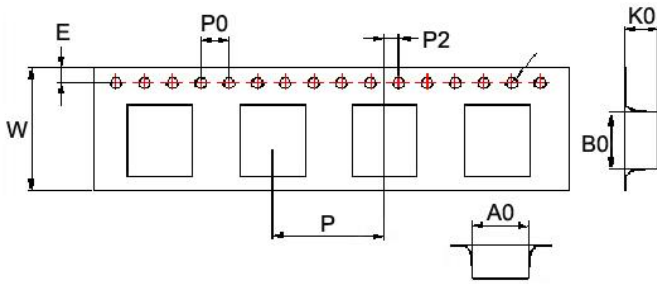
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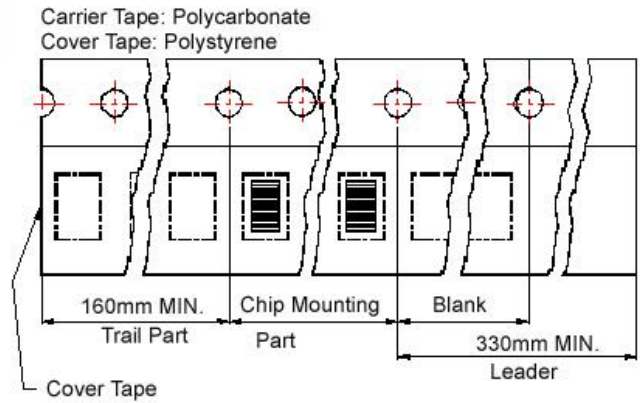
# Molding Power Inductors – BMQx Series

## Packaging Specifications

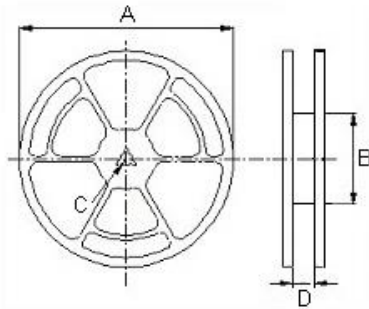
Tape Dimensions



Tape Material



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions									Reel Dimensions				Quantity PCS / REEL
	A0	B0	K0	D	E	W	P	P0	P2	A	B	C	D	
BMQE00040410	4.4	4.9	1.4	1.55	1.75	12	8	4	2	330	100	13	13.4	2000
BMQE00040411	4.4	4.9	1.5	1.55	1.75	12	8	4	2	330	100	13	13.4	2000
BMQE00050511	5.9	6.2	1.5	1.55	1.75	16	12	4	2	330	100	13	16	2000
BMQE00060611	6.9	7.4	1.5	1.55	1.75	16	12	4	2	330	100	13	16	1000