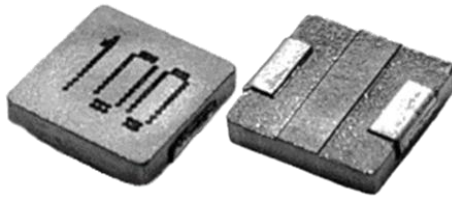


BMNI Series



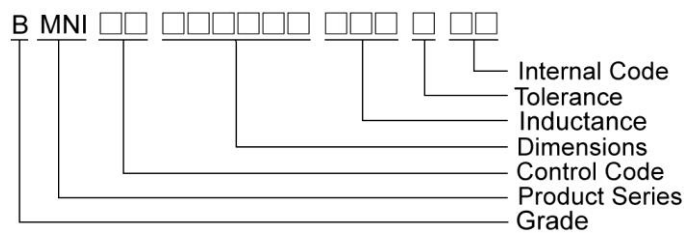
Features

- Low profile molded power inductor
- Low DC resistance and high rating current
- Low profile for limited height application e.g., LED driver
- RoHS compliant, halogen free

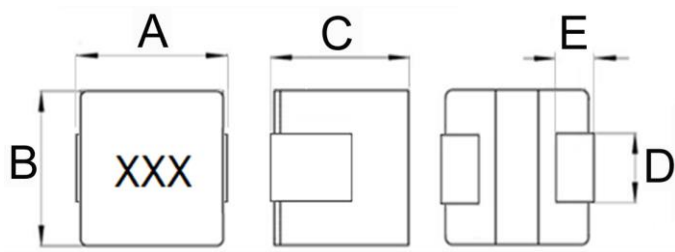
Applications

- Laptop, LCD, LED driver
- Limited height application
- DC to DC boost convertor

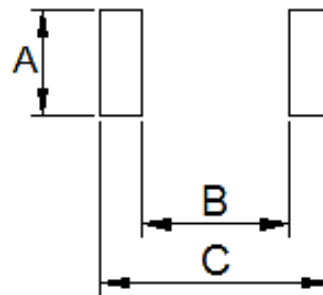
Product Identification



Shape and Dimensions



Recommended Pattern



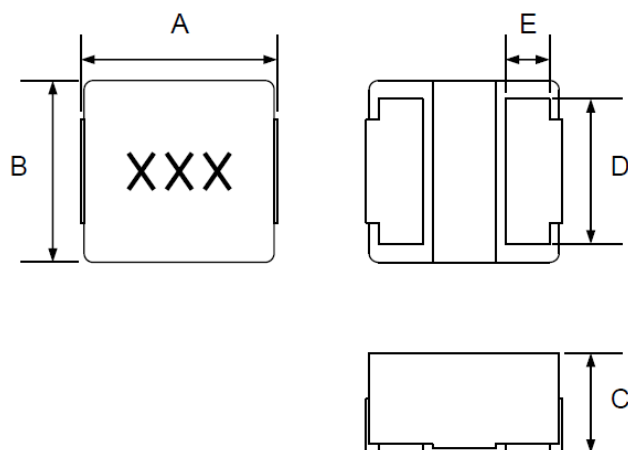
Dimensions in mm

TYPE	A	B	C	D	E
BMNI00040410	4.1±0.2	4.1±0.2	0.8±0.2	1.8±0.2	0.8±0.2

Dimensions in mm

TYPE	A	B	C
BMNI00040410	2.0	2.2	4.4

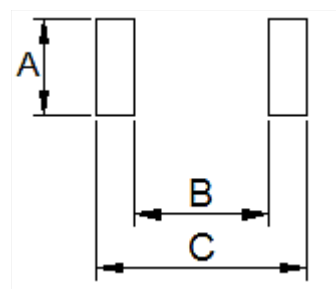
Shape and Dimensions



Dimensions in mm

TYPE	A	B	C	D	E
BMNI00040431-XH	4.0±0.3	4.0±0.3	3.1Max	3.4±0.2	1.0±0.4

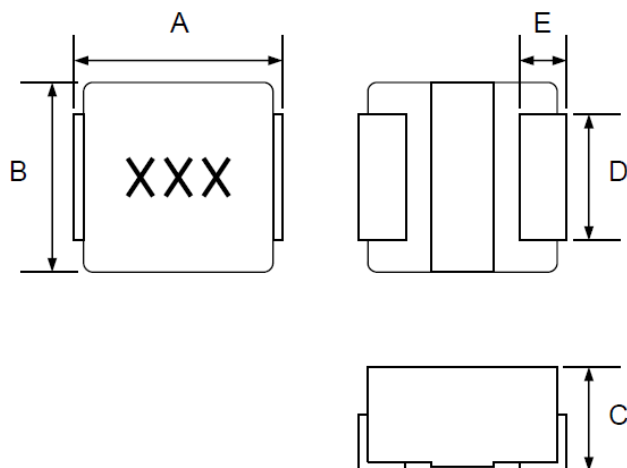
Recommended Pattern



Dimensions in mm

TYPE	A	B	C
BMNI00040431-XH	3.7	1.39	4.5

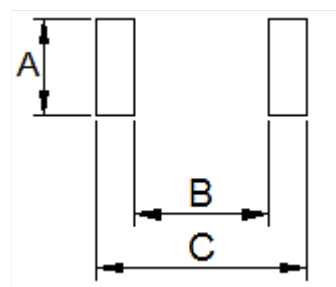
Shape and Dimensions



Dimensions in mm

TYPE	A	B	C	D	E
BMNI00060631-XH	6.36±0.3	6.56±0.3	3.1Max	4.7±0.2	1.55±0.2
BMNI00060632-XH	6.36±0.3	6.56±0.3	3.2Max	4.7±0.2	1.55±0.2

Recommended Pattern



Dimensions in mm

TYPE	A	B	C
BMNI00060631-XH	5.0	2.61	6.7
BMNI00060632-XH	5.0	2.61	6.7

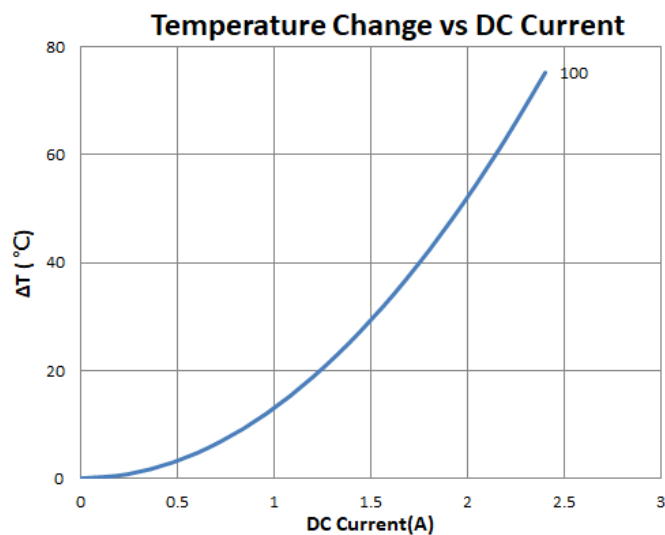
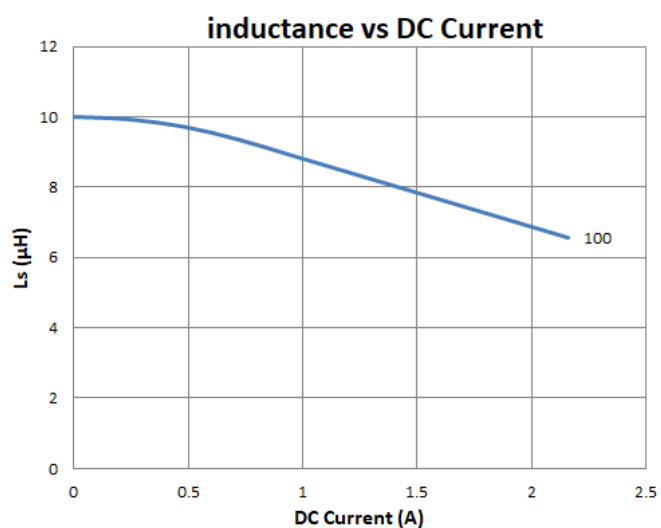
Electrical Characteristics

Part Number	Inductance (μH)	Tolerance ($\pm\%$)	Test Frequency (kHz)	RDC($\text{m}\Omega$) Max(Typ.)	Isat (A)Typ.	Irms (A)Typ.	Marking
BMNI00040410100MQX	10	20	100	330(280)	1.75	16.5	100

Note: When ordering, please specify tolerance code. Tolerance: M= $\pm 20\%$

- 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°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

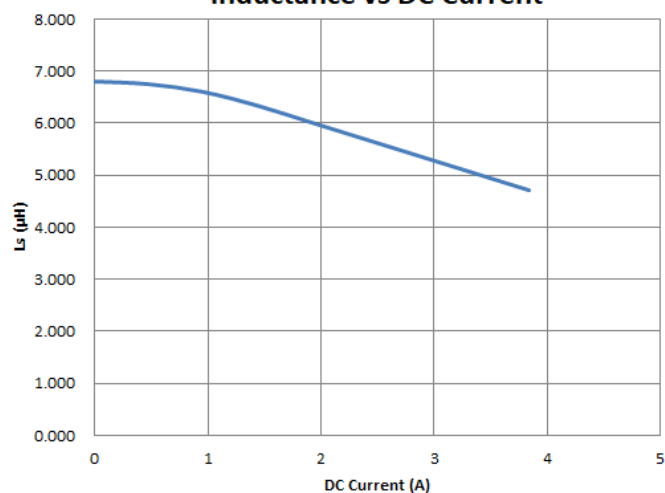
Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (kHz)	RDC(mΩ) Max(Typ.)	Isat (A)Typ.	Irms (A)Typ.	Marking
BMNI000404316R8MXH	6.8	20	100	74.1(67.4)	3.6	3.9	6R8

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

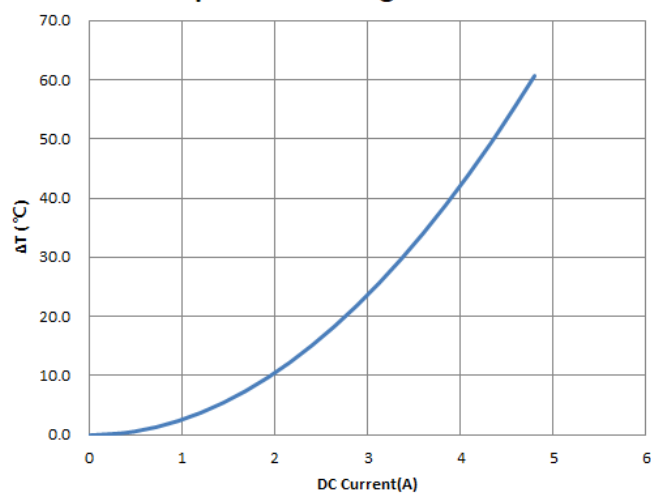
- Operating temperature range –55℃ ~ 125℃ (Including self - temperature rise)
- Isat for Inductance drop 30% from its value without current
- I rms for a 40℃ temperature rise from 25℃ ambient with current
- Measure Equipment :
 L : WK 3260B or WK 6500P, 100kHz 0.25V
 RDC : CHEN HWA 502 or CHEN HWA 46502B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

Test Instruments : WK3260B Impedance / Material Analyzer

inductance vs DC Current



Temperature Change vs DC Current



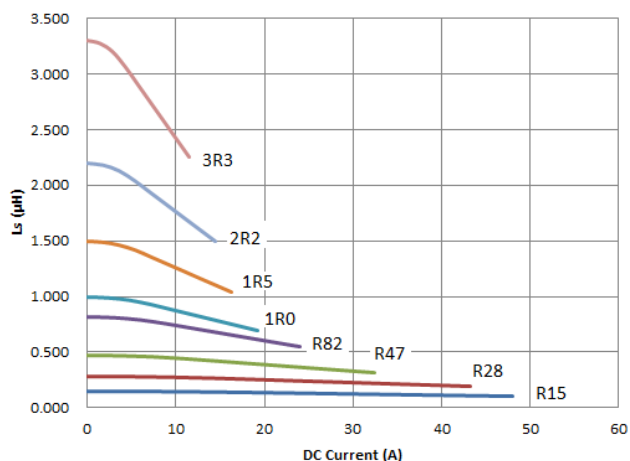
Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (kHz)	RDC(mΩ) Max(Typ.)	Isat (A)Typ	Irms (A)Typ	Marking
BMNI00060632R15MXH	0.15	20	100/0.25V	1.49(1.35)	45	33.3	R15
BMNI00060632R28MXH	0.28	20	100/0.25V	2.35(2.1)	38	26.7	R28
BMNI00060632R47MXH	0.47	20	100/0.25V	3.31(3.01)	28	22.3	R47
BMNI00060632R82MXH	0.82	20	100/0.25V	5.6(5.09)	21	16	R82
BMNI000606321R0MXH	1.0	20	100/0.25V	6.95(6.32)	18	16	1R0
BMNI000606311R5MXH	1.5	20	100/0.25V	10.52(9.57)	15	14	1R5
BMNI000606312R2MXH	2.2	20	100/0.25V	13.97(12.7)	13	10	2R2
BMNI000606313R3MXH	3.3	20	100/0.25V	20.81(19.92)	10.5	8	3R3

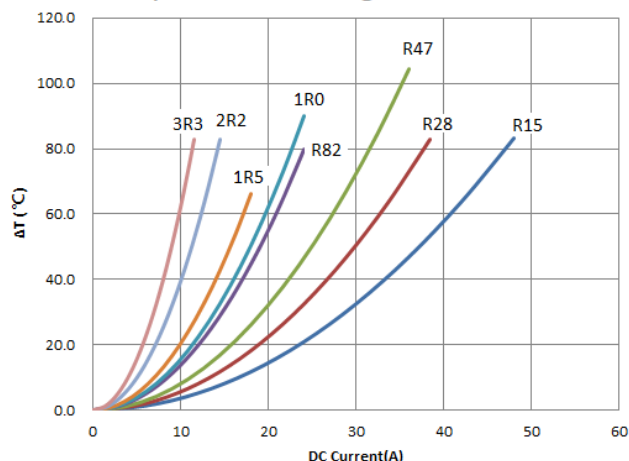
Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- Operating temperature range – 55°C ~ 125°C (Including self - temperature rise)
- Isat for Inductance drop 30% from its value with current
- I rms for a 40°C temperature rise from 25°C ambient with current

Inductance vs. DC Current

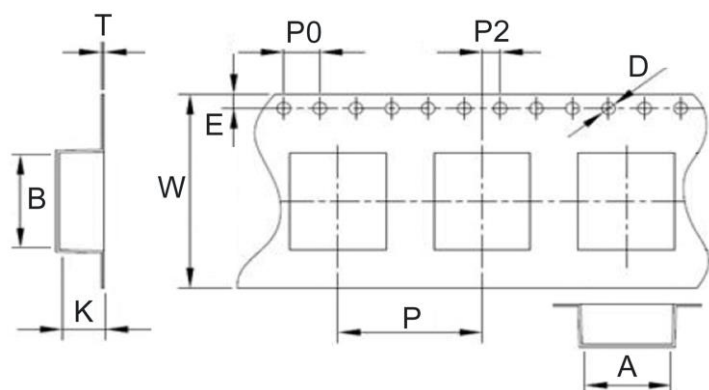


Temperature Change vs. DC Current

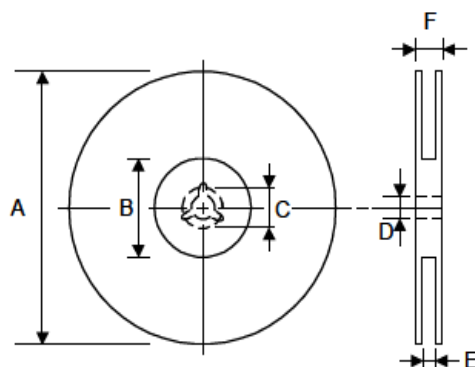


Packaging Specifications

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
BMNI00040410	4.3	4.4	1.6	0.35	1.5	1.75	12	8	4	2		330	100	21.5	13	12.4	17.4	2000
BMNI00040431	4.3	4.4	3.5	0.35	1.5	1.75	12	8	4	2		330	100	21.5	13	12.4	17.4	2000
BMNI00060631	6.8	6.56	3.4	0.35	1.5	1.75	12	8	4	2		330	100	21.5	13	16.4	21.4	1000
BMNI00060632	6.8	6.56	3.4	0.35	1.5	1.75	12	8	4	2		330	100	21.5	13	16.4	21.4	1000