BMME Series



BMME 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.

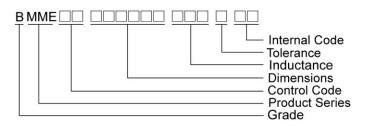
Features

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

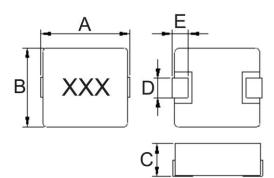
Applications

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

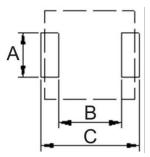
Product Identification



Shape and Dimensions



Recommended Pattern



Dimensions in mm					Dimensions in mm						
TYPE	Α	В	С	D	Е	TYPE	Α	В	С		
BMME00040412	4.45±0.25	4.06±0.25	1.2Max	2.0±0.3	0.76±0.3	BMME00040412	2.5	2.2	5.2		
BMME00050512	5.49±0.25	5.18±0.22	1.2Max	2.0±0.3	1.0±0.3	BMME00050512	2.5	2.2	5.99		
BMME00050530	5.3Max	4.7±0.2	3.0Max	2.0±0.2	1.0±0.3	BMME00050530	2.5	3.0	7.0		
BMME00060618	6.95±0.35	6.6±0.2	1.8Max	3.0±0.3	1.6±0.3	BMME00060618	3.5	3.7	8.4		
BMME00060630	6.86±0.38	6.47±0.25	3.0Max	3.0±0.3	1.3±0.3	BMME00060630	3.43	3.71	7.37		
BMME00080850	8.3±0.3	8.1±0.3	5.0Max	3.0±0.3	1.5±0.3	BMME00080850	3.5	4.2	9		
BMME00101020	11.5Max	10±0.3	2.0Max	3.0±0.5	2.2±0.3	BMME00101020	4.1	5.4	13.6		



Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (kHz)	RDC(mΩ) Max(Typ.)	lsat(A) Max(Typ.)	Irms(A) Max(Typ.)	Marking
BMME00040412R47MX2	0.47	20	100	18.4(16)	9.2(10.6)	8.5(9.5)	R47

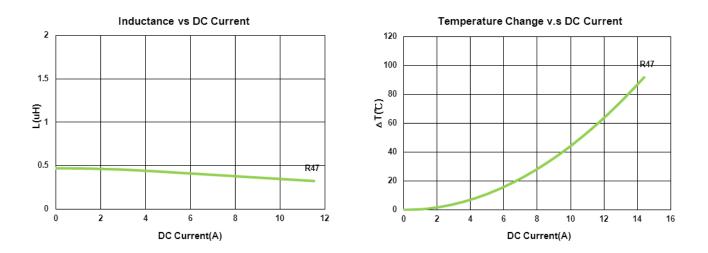
Note: When ordering, please specify tolerance code. Tolerance: M= $\pm 20\%$

• 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 $^\circ\!\mathrm{C}$ temperature rise from 25 $^\circ\!\mathrm{C}$ 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) Max(Typ.)	Irms(A) Max(Typ.)	Marking
BMME000505121R5MX1	1.5	20	100	50(42)	6.3(7)	4.3(4.7)	1R5

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

• Operating temperature range - 55°C ~ 125°C(Including self - temperature rise)

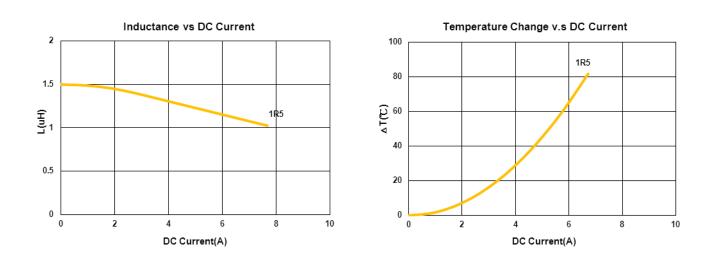
• Isat for Inductance drop 30% from its value without current

- Irms for a 40 $^\circ$ C temperature rise from 25 $^\circ$ 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
BMME000505304R7MX1	4.7	20	100	53(47.7)	6	4.6	4R7

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

• Operating temperature range - 55°C ~ 125°C(Including self - temperature rise)

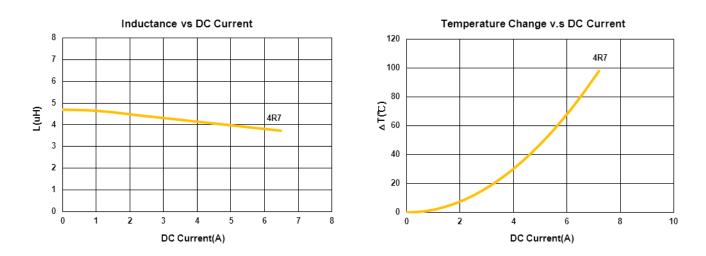
• Isat for Inductance drop 20% from its value without current

- Irms for a 40 $^\circ$ C temperature rise from 25 $^\circ$ 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

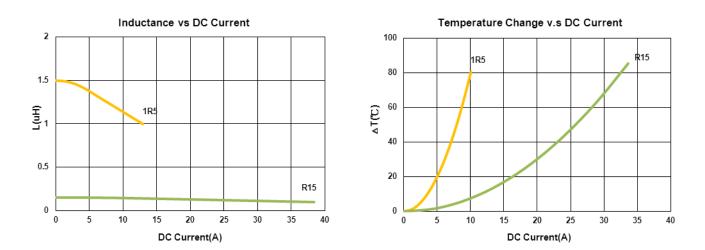
Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (kHz)	RDC(mΩ) Max(Typ.)	lsat(A) Max(Typ.)	Irms(A) Max(Typ.)	Marking
BMME00060618R15MX1	0.15	20	100	3.4(2.9)	30(35)	21(23)	R15
BMME000606181R5MX1	1.5	20	100	20(17)	9.8(11.3)	6.5(7.1)	1R5

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 $^\circ\!\mathrm{C}$ temperature rise from 25 $^\circ\!\mathrm{C}$ 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)±10%)	lsat (A)Typ.	Irms (A)Typ.	Marking
BMME000606301R0MI8	1.0	20	100	5.5	17	14	1R0

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

Operating temperature range - 55°C ~ 125°C(Including self - temperature rise) ٠

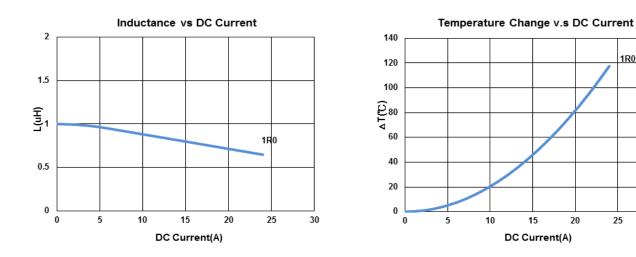
• Isat for Inductance drop 25% from its value without current

- Irms for a 40 $^\circ\!{\rm C}$ temperature rise from 25 $^\circ\!{\rm C}$ 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





1R0

20

25

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Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (kHz)	RDC (mΩ)±10%	lsat (A)Typ.	Irms (A)Typ.	Marking
BMME00080850R22MI8	0.22	20	100	0.71	50	40	R22

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

• Operating temperature range - 55°C ~ 125°C(Including self - temperature rise)

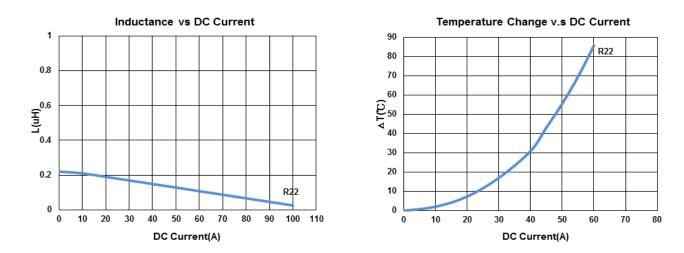
• Isat for Inductance drop 25% from its value without current

- 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

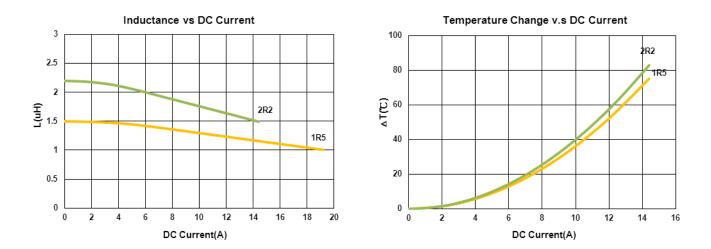
Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (kHz)	RDC(mΩ) Max(Typ.)	lsat (A)Typ.	Irms(A) (A)Typ.	Marking
BMME001010201R5MX1	1.5	20	100	14.5(12.2)	14(17)	9.5(10.5)	1R5
BMME001010202R2MX1	2.2	20	100	16.5(14)	11(13)	8.5(10)	2R2

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 $^\circ\!\mathrm{C}$ temperature rise from 25 $^\circ\!\mathrm{C}$ 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

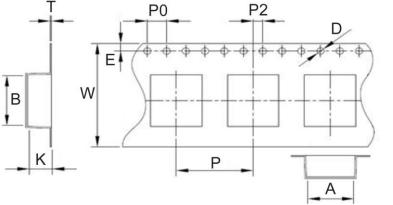


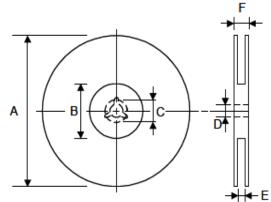


Packaging Specifications

Tape Dimensions

Reel Dimensions





Dimensions in mm

TYDE	Tape Dimensions							Reel Dimensions				;	Quantity				
A	Α	в	к	т	D	Е	w	Р	P0	P2	Α	в	С	D	Е	F	PCS / REEL
BMME00040412	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
BMME00050512	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
BMME00050530	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
BMME00060618	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
BMME00060630	6.9	7.6	3.4	0.4	1.5	1.75	16	12	4	2	330	100	21.5	13	16.4	21.4	1000
BMME00080850	8.3	8.5	5.2	0.4	1.5	1.75	16	12	4	2	330	100	21.5	13	16.4	21.4	500
BMME00101020	10.4	11.5	2.8	0.35	1.5	1.75	24	16	4	2	330	100	21.5	13	24.4	29.2	500

