## **Molding Power Inductors**

BMMS Series





BMMS 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.

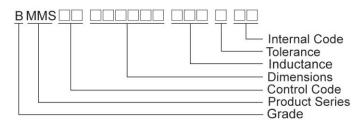
#### Features

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

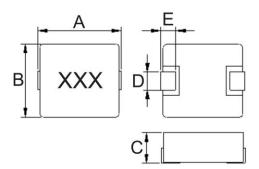
#### Applications

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

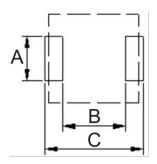
#### **Product Identification**



#### Shape and Dimensions



#### **Recommended Pattern**



Dimensions in mm						Dimensions in mm							
TYPE	Α	В	С	D	E	ТҮРЕ	Α	В	С				
BMMS00040412	4.45±0.25	4.06±0.25	1.2Max	2.0±0.3	0.76±0.3	BMMS00040412	2.5	2.5	5.2				
BMMS00060630	6.95±0.35	6.60±0.20	3.0Max	3.0±0.3	1.60±0.3	BMMS00060630	3.5	3.7	8.4				
BMMS00101040	11.5Max	10.0±0.30	4.0Max	3.0±0.5	2.00±0.5	BMMS00101040	4.1	5.4	13.6				
BMMS00131360	14.2Max	12.6±0.20	6.0Max	3.2±0.3	2.30±0.3	BMMS00131360	5.5	8.0	14.5				

#### 1



#### **Electrical Characteristics**

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (kHz)	RDC(mΩ) Max(Typ.)	lsat (A)Typ.	Irms (A)Typ.	Marking	
BMMS00040412R68MX2	0.68	20	100	36(32)	6	4.5	R68	
BMMS000404124R7MX2	1.0	20	100	195(175)	2.8	1.8	4R7	

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

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

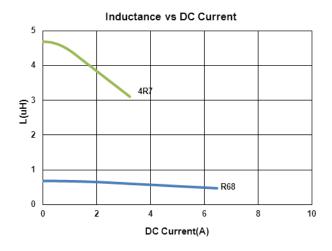
- Isat for Inductance drop 30% from its value without current
- Irms for a 40°C temperature rise from 25°C ambient with current
- Measure Equipment :

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



Temperature Change v.s DC Current 120 R68 100 4R7 80 00 AT(C) 40 20 0 0 2 4 6 8 10 DC Current(A)

# Molding Power Inductors

BMMS Series



#### **Electrical Characteristics**

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (kHz)	RDC(mΩ) Max(Typ.)	lsat (A)Typ.	Irms (A)Typ.	Marking
BMMS00060630R47MX2	0.47	20	100	4.1(3.5)	20	18	R47
BMMS000606301R0MX2	1.0	20	100	7.4(6.7)	15	12	1R0
BMMS000606302R2MX2	2.2	20	100	15(13.5)	10	8	2R2
BMMS000606306R8MX2	6.8	20	100	50(43.9)	6	4.5	6R8

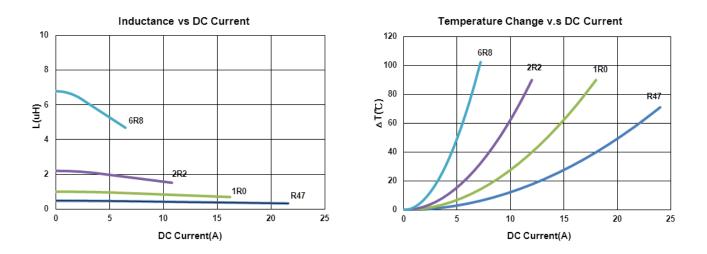
Note: When ordering, please specify tolerance code. Tolerance: M=±20%

• 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  $^\circ\!\!\mathbb{C}$  temperature rise from 25  $^\circ\!\!\mathbb{C}$  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)Typ.	Marking
BMMS001010408R2MX2	8.2	20	100	27(25)	9	6	8R2

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

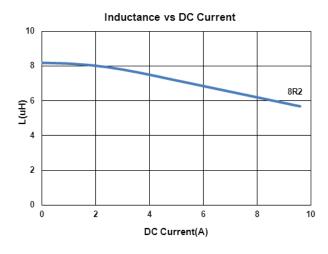
Measure Equipment :

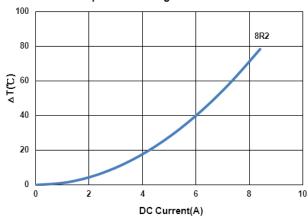
L : WK 3260B or WK 6500P, 100kHz 0.25V

RDC : CHEN HWA 502 or CHEN HWA 46502B

Irms : CHROMA 1810

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





Temperature Change v.s DC Current

### Molding Power Inductors BMMS Series

Pulse
 a YAGEO company

#### **Electrical Characteristics**

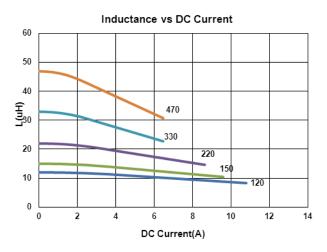
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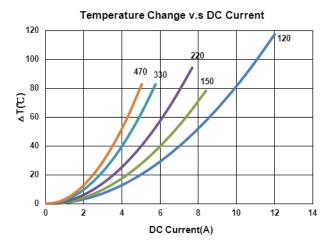
Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (kHz)	RDC(mΩ) Max(Typ.)	lsat (A)Typ.	Irms (A)Typ.	Marking
BMMS00131360120MX2	12	20	100	23(20)	10	7	120
BMMS00131360150MX2	15	20	100	29(25)	9	6	150
BMMS00131360220MX2	22	20	100	39.5(34)	7.5	5	220
BMMS00131360330MX2	33	20	100	75(65)	6	4	330
BMMS00131360470MX2	47	20	100	90(80)	5.5	3.5	470

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  $^\circ\!{\rm C}$  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





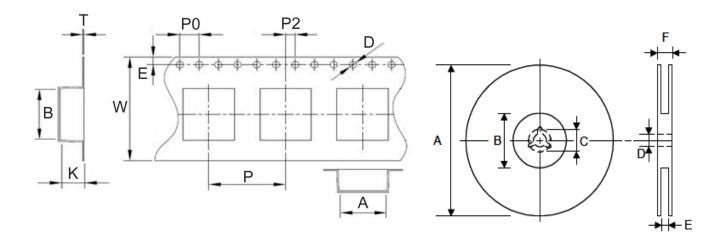
## Molding Power Inductors BMMS Series

Pulse
 a YAGEO company

#### **Packaging Specifications**

**Tape Dimensions** 

**Reel Dimensions** 



#### **Dimensions in mm**

TYPE	Tape Dimensions								Reel Dimensions				Quantity				
	A	в	к	т	D	Е	w	Ρ	P0	P2	Α	в	С	D	Е	F	PCS / REEL
BMNN00040420	4.3	4.4	2.4	0.35	1.5	1.75	12	8	4	2	330	100	21.5	13	12.4	17.4	2000

#### For More Information:

Americas - prodinfo\_power\_americas@yageo.com | Europe - prodinfo\_power\_emea@yageo.com | Asia - prodinfo\_power\_asia@yageo.com

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# **Mouser Electronics**

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Pulse:

 BMMS000404124R7MX2
 BMMS00040412R68MX2
 BMMS000606301R0MX2
 BMMS000606302R2MX2

 BMMS000606306R8MX2
 BMMS00060630R47MX2
 BMMS001010408R2MX2
 BMMS00131360120MX2

 BMMS00131360150MX2
 BMMS00131360220MX2
 BMMS00131360330MX2
 BMMS00131360470MX2