



The BEBE Series is designed specifically to enhance the performance of both PFM and PWM applications. The Rac value at light load and the RDC value at heavy load are both exceptional. Furthermore, the saturated current performance is also optimal, helping to reduce the ripple current and enhance the efficiency.

- RoHS, Halogen Free and REACH Compliance
- High performance (Isat) realized by metal dust core.
- Low coil resistance with large currents.

- Smartphones, wearable devices, Pad, Notebook

B EBE

Figure 1 consists of three schematic diagrams labeled (a), (b), and (c). Diagram (a) is a top view of the device, showing a central black rectangular region labeled 'Core Top' and two white rectangular regions on either side labeled 'Terminal Electrode'. Dimensions are indicated: 'A' for the total width, 'B' for the total height, 'C' for the height of the central region, and 'G' for the width of the central region. Diagram (b) is a 3D perspective view of the device, showing a black rectangular block with two white rectangular regions on the top surface. Diagram (c) is a front view of the device, showing a black rectangular block with a white rectangular region on the top surface, labeled 'Core Top'.

A diagram of a U-shaped cross-section. The width of the base is labeled 'B'. The width of the opening at the top is labeled 'A'. The height of the vertical side walls is labeled 'C'.

BEBE Series

Dimensions in mm

TYPE	A	B	C	G
1412F5	1.4±0.2	1.2±0.2	0.65Max	0.53
141208	1.4±0.2	1.2±0.2	0.8Max	0.53
201208	2.0±0.2	1.2±0.2	0.8Max	0.6
201210	2.0±0.2	1.2±0.2	0.8Max	0.6
201608	2.0±0.2	1.6±0.2	0.8Max	0.6
201610	2.0±0.2	1.6±0.2	1.0Max	0.6
252010	2.5±0.2	2.0±0.2	1.0Max	0.7
252012	2.5±0.2	2.0±0.2	1.2Max	0.7
322508	3.2±0.2	2.5±0.2	0.8Max	0.9
322512	3.2±0.2	2.5±0.2	1.2Max	0.9
303012	3.1±0.2	2.9±0.2	1.2Max	1.1

Dimensions in mm

TYPE	A	B	C
1412F5	0.5	1.6	1.4
141208	0.5	1.6	1.4
201208	0.5	2.2	1.4
201210	0.5	2.2	1.4
201608	0.7	2.3	1.8
201610	0.7	2.3	1.8
252010	0.6	2.7	2.2
252012	0.6	2.7	2.2
322508	0.8	3.7	2.8
322512	0.8	3.7	2.8
303012	1.2	3.4	3.2

BEBE001412 Series Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	I _{rms} (A) Max(Typ)	I _{sat} (A) Max(Typ)	RDC(mΩ) Max(Typ)
BEBE001412F5R33MMA	0.33	20	1MHz, 1V	3.0(3.3)	5.0(5.5)	32(26)
BEBE001412F5R47MMA	0.47	20	1MHz, 1V	2.6(2.9)	3.0(3.3)	42(35)
BEBE00141208R24MMA	0.24	20	1MHz, 1V	5.3(5.8)	6.0(6.5)	20(18)
BEBE00141208R33MMA	0.33	20	1MHz, 1V	3.6(4.0)	4.5(5.0)	25(23)
BEBE00141208R47MMA	0.47	20	1MHz, 1V	3.0(3.3)	4.0(4.5)	30(28)
BEBE001412081R0MMA	1.00	20	1MHz, 1V	2.0(2.3)	2.5(2.8)	77(70)
BEBE00141208R33MMS	0.33	20	1MHz, 1V	3.6(4.0)	5.5(5.7)	25(23)
BEBE00141208R47MMS	0.47	20	1MHz, 1V	3.0(3.3)	4.8(5.0)	30(28)

BEBE002012 Series Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	Irms(A) Max(Typ)	Isat(A) Max(Typ)	RDC(mΩ) Max(Typ)
BEBE00201208R11MMA	0.11	20	1MHz, 1V	6.5(7.0)	8.6(9.1)	12(10)
BEBE00201208R24MMA	0.24	20	1MHz, 1V	6.0(6.5)	7.9(8.3)	20(17)
BEBE00201208R33MMA	0.33	20	1MHz, 1V	4.7(5.3)	6.0(6.5)	20(18)
BEBE00201208R47MMA	0.47	20	1MHz, 1V	3.7(4.2)	4.3(4.8)	25(23)
BEBE002012101R0MMA	1.00	20	1MHz, 1V	3.1(3.5)	3.3(3.8)	50(42)
BEBE00201210R33MMA	0.33	20	1MHz, 1V	4.7(5.3)	6.0(6.5)	20(18)
BEBE00201210R47MMA	0.47	20	1MHz, 1V	4.2(4.7)	5.0(5.5)	24(21)

BEBE002016 Series Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	Irms(A) Max(Typ)	Isat(A) Max(Typ)	RDC(mΩ) Max(Typ)
BEBE00201608R47MMA	0.47	20	1MHz, 1V	4.5(4.9)	4.7(5.2)	24(21)
BEBE002016081R0MMA	1.00	20	1MHz, 1V	4.0(4.5)	3.6(4.1)	35 (30)
BEBE002016082R2MMA	2.20	20	1MHz, 1V	2.3(2.6)	2.7(3.0)	90(80)
BEBE00201610R47MMA	0.47	20	1MHz, 1V	4.5(5.0)	5.7(6.1)	20(18)
BEBE002016101R0MMA	1.00	20	1MHz, 1V	4.1(4.5)	4.2(4.6)	43(35)

BEBE002520 Series Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	Irms(A) Max(Typ)	Isat(A) Max(Typ)	RDC(mΩ) Max(Typ)
BEBE00252010R47MMA	0.47	20	1MHz, 1V	5.9(6.5)	6.5(7.2)	15.0(13.0)
BEBE00252010R68MMA	0.68	20	1MHz, 1V	5.0(5.5)	5.5(6.0)	18.5(16.0)
BEBE002520101R0MMA	1.00	20	1MHz, 1V	5.2(5.7)	5.0(5.5)	25.0(18.0)
BEBE002520102R2MMA	2.20	20	1MHz, 1V	2.6(2.9)	2.5(3.0)	77.0(70.0)
BEBE00252012R22MMB	0.22	20	1MHz, 1V	8.0(8.5)	9.0(9.5)	13.0(10.0)
BEBE00252012R47MMB	0.47	20	1MHz, 1V	5.0(5.5)	6.0(6.5)	18.0(15.0)
BEBE002520121R0MMB	1.00	20	1MHz, 1V	4.2(5.0)	4.3(4.9)	32.0(27.0)

BEBE003225 Series Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	Irms(A) Max(Typ)	Isat(A) Max(Typ)	RDC(mΩ) Max(Typ)
BEBEBZ32250880NMMA	0.08	20	1MHz, 1V	8.0(9.0)	14.5(15.5)	4.2(3.9)
BEBEBZ322510R22MMA	0.22	20	1MHz, 1V	7.0(7.5)	10.0(11.0)	12.5(10.5)

BEBE003030 Series Electrical Characteristics

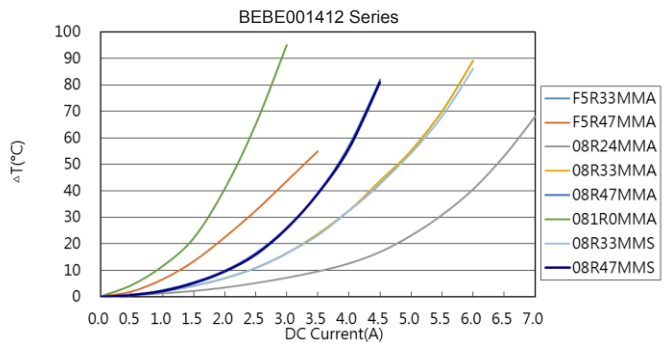
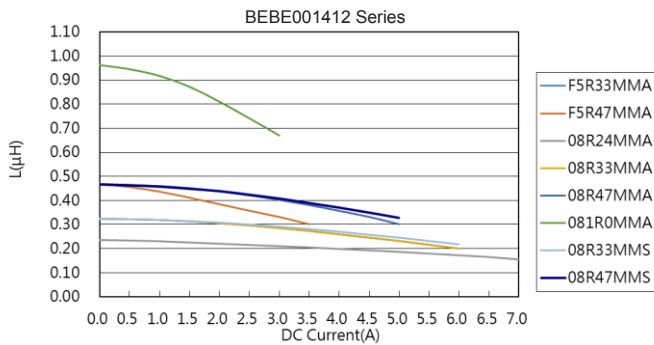
Part Number	Inductance (μ H)	Tolerance ($\pm\%$)	Test Frequency (MHz)	Irms(A) Max(Typ)	Isat(A) Max(Typ)	RDC(m Ω) Max(Typ)
BEBE003030121R0MMA	1.0	20	1MHz, 1V	5.3(5.8)	6.3(6.8)	30.0(27.0)

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

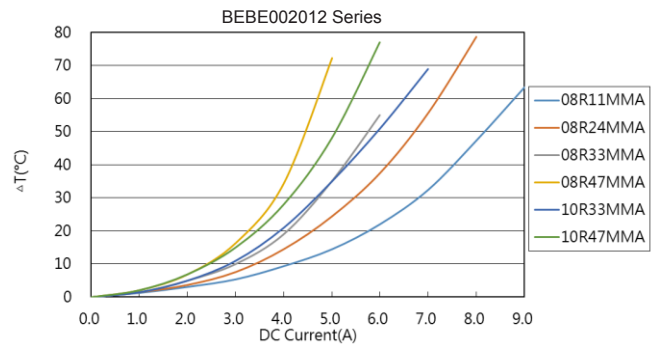
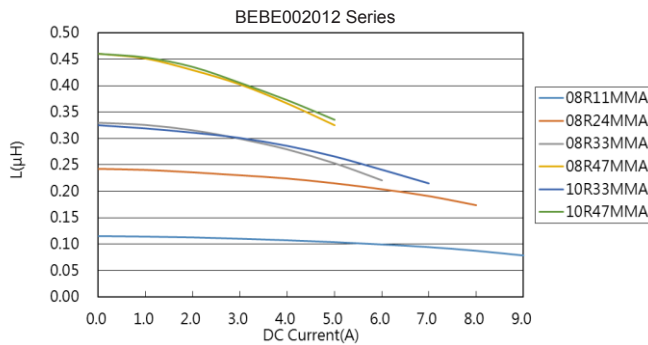
- Operating temperature range –40°C ~125°C (Including self - temperature rise)
- Isat for Inductance drop 30% from its value without current
- Irms for a 40°C temperature rise from 25°C ambient with current
- Rated current : Isat or Irms, whichever is smaller
- Absolute maximum voltage 15VDC(Based on test method, it may not the same under different application, it is recommended to verify first.)
- Measure Equipment :
 - L : Agilent E4991/HP4286A+16197A/WP6500P (or equivalent), 1MHz 1V
 - RDC : CHEN HWA502BC/HP4338B (or equivalent)
 - Isat : Agilent E4980A+HP42841A (or equivalent)
 - Irms : Agilent 6641 SYSTEM DC POWER SUPPLY (or equivalent)

Graph:

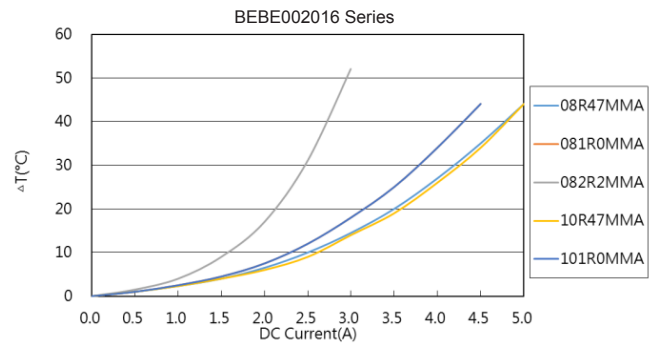
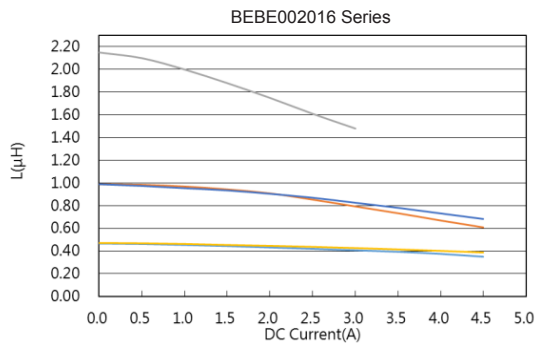
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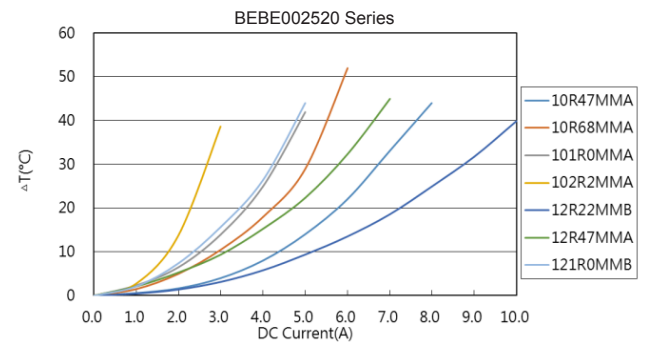
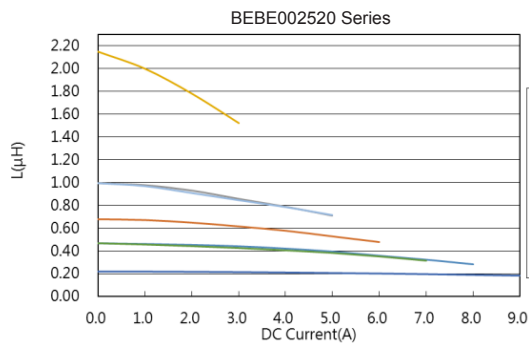
● BEBE002012 Series



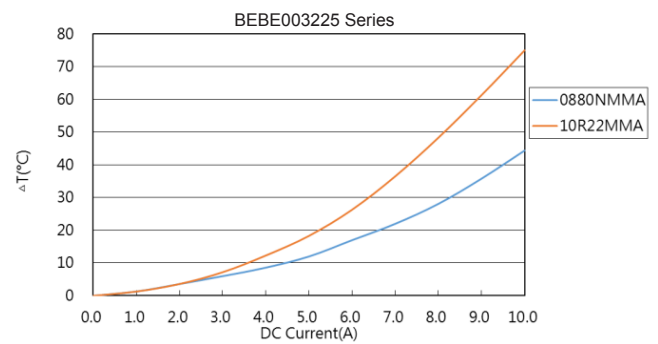
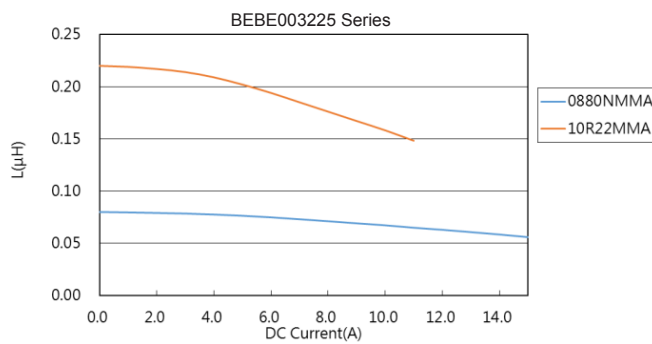
● BEBE002016 Series



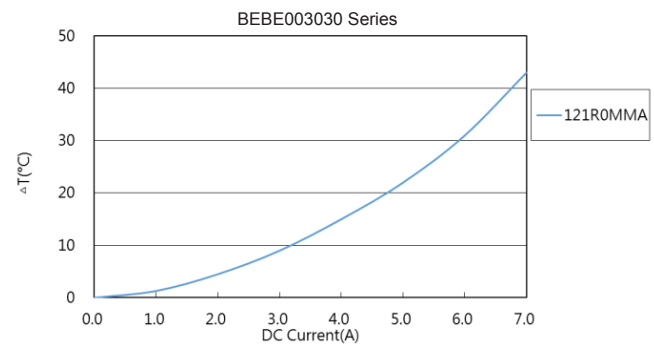
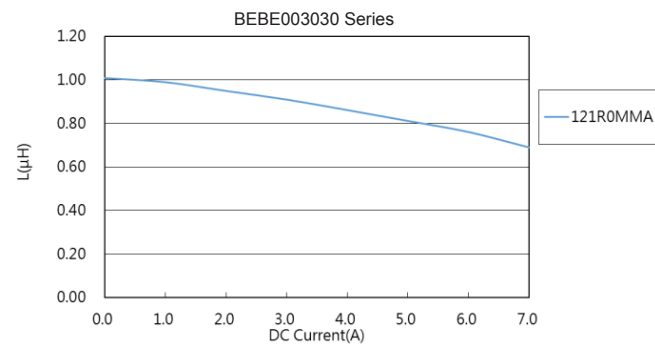
● BEBE002520 Series



● BEBE003225 Series

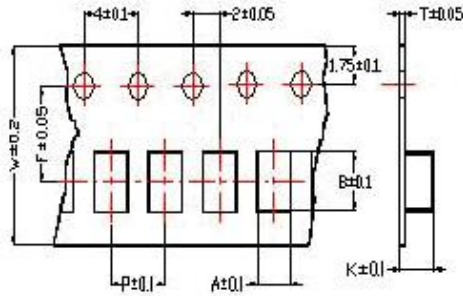


● BEBE003030 Series



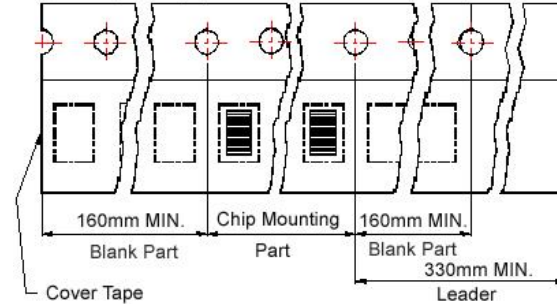
Packaging Specifications

Tape Dimensions

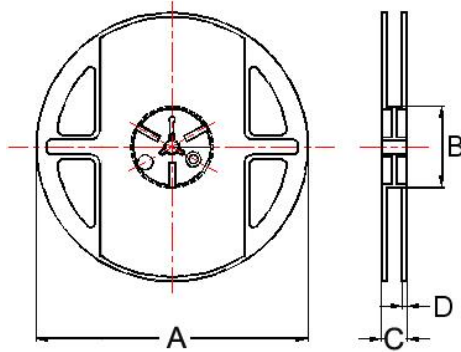


Tape Material

Carrier Tape: Polycarbonate
Cover Tape: Polystyrene



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions								Reel Dimensions				Quantity PCS / REEL
	A	B	T	W	P	F	K		A	B	C	D	
1412F5	1.50	1.70	0.22	8	4	3.5	0.80		178	60	12	1.5	3000
141208	1.50	1.70	0.22	8	4	3.5	0.95		178	60	12	1.5	3000
201208	1.50	2.30	0.22	8	4	3.5	0.95		178	60	12	1.5	3000
201210	1.50	2.30	0.22	8	4	3.5	1.15		178	60	12	1.5	3000
201608	1.90	2.30	0.22	8	4	3.5	0.95		178	60	12	1.5	3000
201610	1.90	2.30	0.22	8	4	3.5	1.15		178	60	12	1.5	3000
252010	2.30	2.80	0.25	8	4	3.5	1.15		178	60	12	1.5	3000
252012	2.30	2.80	0.25	8	4	3.5	1.35		178	60	12	1.5	3000
322508	2.80	3.50	0.25	8	4	3.5	0.95		178	60	12	1.5	3000
322512	2.80	3.50	0.25	8	4	3.5	1.35		178	60	12	1.5	2000
303012	3.35	3.50	0.25	8	4	3.5	1.35		178	60	12	1.5	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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