

Molding Power Inductors – BDHL Series

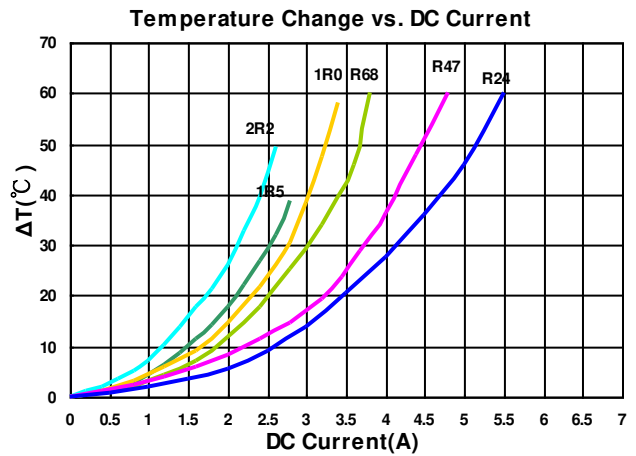
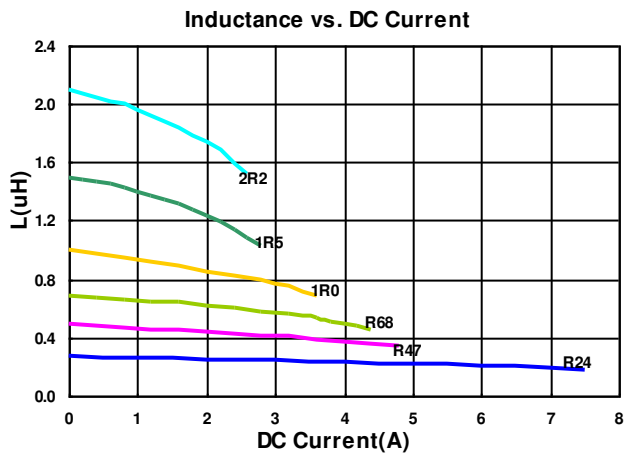
Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	RDC(mΩ) Max(Typ.)	Isat(A) Max(Typ.)	Irms(A) Max(Typ.)
BDHL00201610R24MQ1	0.24	20	2	27(21)	5.6(7.0)	3.9(4.8)
BDHL00201610R47MQ1	0.47	20	2	42(33)	3.9(4.8)	3.5(4.2)
BDHL00201610R68MQ1	0.68	20	2	56(43)	3.2(4.0)	2.7(3.4)
BDHL002016101R0MQ1	1.0	20	2	65(53)	2.9(3.6)	2.5(3.1)
BDHL002016101R5MQ1	1.5	20	2	85(75)	2.5(2.8)	2.3(2.7)
BDHL002016102R2MQ1	2.2	20	2	135(112)	2.4(2.7)	1.8(2.2)

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
- I rms for a 40°C temperature rise from 25°C ambient with current
- Rated current : Isat or I rms, whichever is smaller
- Absolute maximum voltage 20VDC
- Measure Equipment :
 - L : Agilent E4991/HP4286A+16197A (or equivalent), 2MHz 0.2V
 - RDC : CHEN HWA502BC/HP4338B (or equivalent)
 - Isat : Agilent E4980A+HP42841A (or equivalent)
 - I rms : Agilent 6641 SYSTEM DC POWER SUPPLY (or equivalent)

Test Instruments : E4991A Impedance / Material Analyzer



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Electrical Characteristics

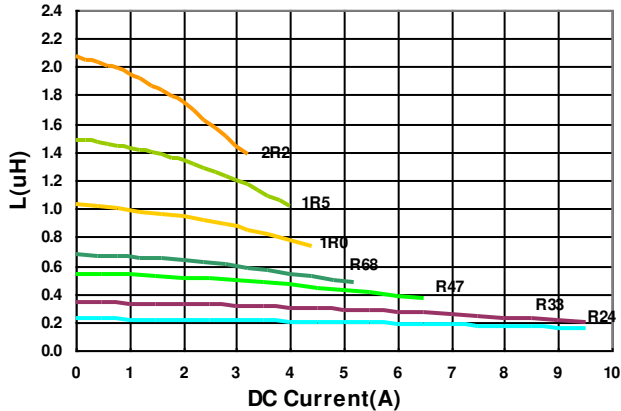
Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	RDC(mΩ) Max(Typ.)	Isat(A) Max(Typ.)	Irms(A) Max(Typ.)
BDHL00252010R24MQ1	0.24	20	2	18(13)	8.0(9.5)	5.5(6.5)
BDHL00252010R33MQ1	0.33	20	2	24(18)	6.5(8.0)	4.8(5.5)
BDHL00252010R47MQ1	0.47	20	2	35(27)	5.0(6.2)	3.9(4.5)
BDHL00252010R68MQ1	0.68	20	2	40(32)	4.5(5.6)	3.7(4.2)
BDHL002520101R0MQ1	1.0	20	2	53(45)	3.7(4.6)	3.0(3.5)
BDHL002520101R5MQ1	1.5	20	2	75(68)	3.1(3.8)	2.4(2.8)
BDHL002520102R2MQ1	2.2	20	2	97(87)	2.5(3.0)	2.2(2.5)

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

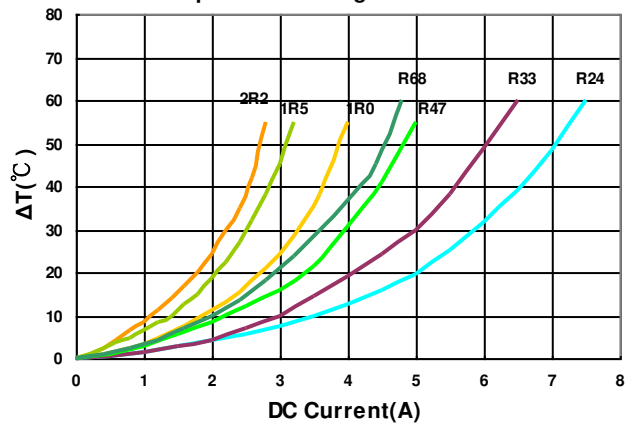
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Inductance vs. DC Current



Temperature Change vs. DC Current



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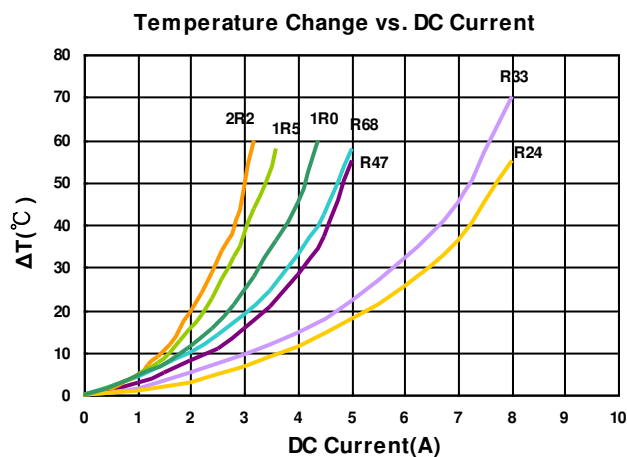
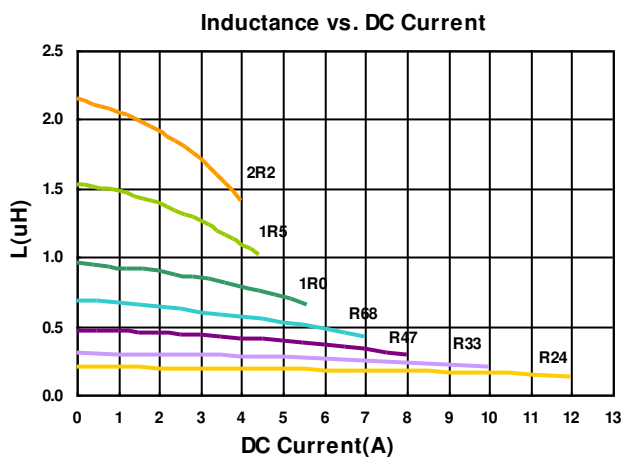
Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	RDC(mΩ) Max(Typ.)	Isat(A) Max(Typ.)	Irms(A) Max(Typ.)
BDHL00252012R24MQ1	0.24	20	2	15(11.5)	9.0(10.5)	6.2(7.3)
BDHL00252012R33MQ1	0.33	20	2	18(14.5)	8.5(10)	5.8(6.4)
BDHL00252012R47MQ1	0.47	20	2	33(28)	5.6(7.0)	3.8(4.5)
BDHL00252012R68MQ1	0.68	20	2	36(30)	5.0(6.2)	3.8(4.4)
BDHL002520121R0MQ1	1.0	20	2	42(35)	4.4(5.5)	3.6(4.1)
BDHL002520121R5MQ1	1.5	20	2	65(57)	3.4(4.2)	2.7(3.1)
BDHL002520122R2MQ1	2.2	20	2	83(74)	3.0(3.7)	2.5(2.9)

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

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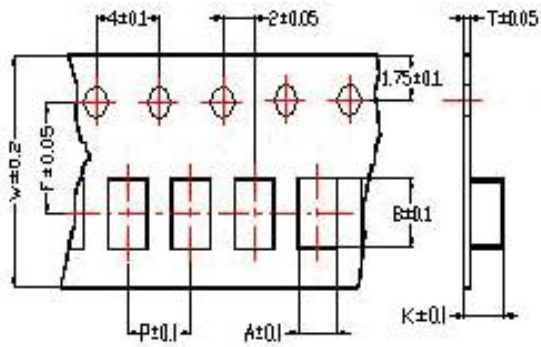
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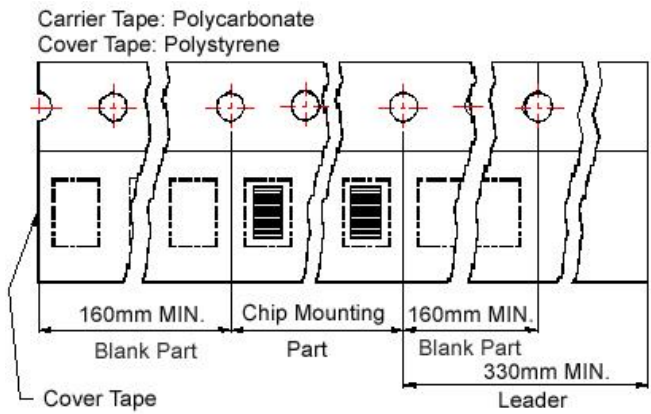
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Packaging Specifications

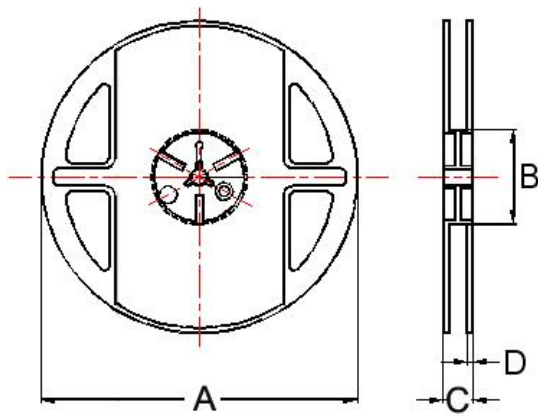
Tape Dimensions



Tape Material



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions							Reel Dimensions				Quantity PCS / REEL
	A	B	T	W	P	F	K	A	B	C	D	
BDHL00201610	1.90	2.30	0.22	8	4	3.5	1.15	178	60	12	1.5	3000
BDHL00252010	2.25	2.80	0.22	8	4	3.5	1.15	178	60	12	1.5	3000
BDHL00252012	2.30	2.80	0.22	8	4	3.5	1.35	178	60	12	1.5	3000