HPPC Series



HPPC series is low profile molding power choke with low RDC and high Q factor, so the efficiency performance is also superior. 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.

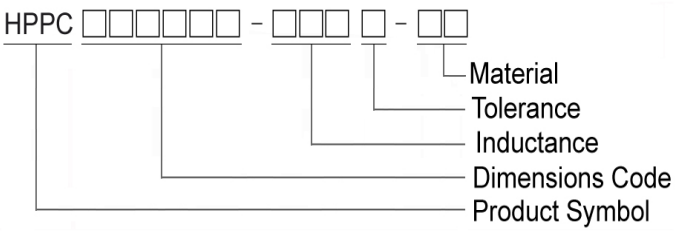
Features

- RoHS, Halogen Free and REACH Compliance
- Low RDC
- High Q
- High Efficiency
- Ultra-low buzz noise

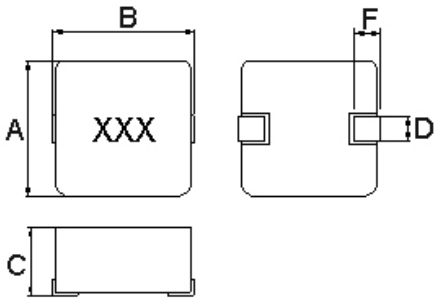
Applications

- Laptops and PCs
- Switchs and servers
- Base stations
- DC/DC converters

Product Identification



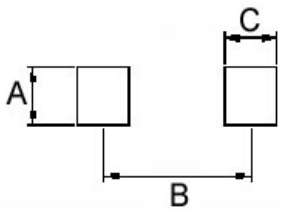
Shape and Dimensions



Dimensions in mm

TYPE	A	B	C	D	F
04011	4.1±0.2	4.6±0.2	1.1Max	1.5±0.3	1.0±0.3
04020	4.2±0.2	4.8±0.2	1.8±0.2	1.5±0.3	1.1±0.3
05011	5.5±0.2	5.7±0.2	1.1Max	2.0±0.3	1.5±0.3
05030	5.5±0.25	5.85±0.25	2.8±0.2	2.0±0.25	1.5±0.25
06011	6.6±0.2	6.95±0.35	1.1Max	3.0±0.3	1.6±0.3
06020	6.8±0.2	6.95±0.35	1.8±0.2	3.0±0.3	1.6±0.3
06030	6.8±0.2	7.3±0.2	2.8±0.2	3.0±0.3	1.6±0.3
10040	10.2±0.3	11.3±0.3	3.8±0.2	3.0±0.5	2.5±0.5

Recommended Pattern



Dimensions in mm

TYPE	A	B	C
04011	2.5	3.7	1.5
04020	2.5	3.7	1.5
05011	2.5	4.1	1.9
05030	2.5	4.6	1.9
06011	3.5	6.05	2.35
06020	3.5	6.05	2.35
06030	3.5	6.05	2.35
10040	4.0	9.50	3.50

Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	RDC(mΩ) Max(Typ.)	Isat(A) Max(Typ.)	Irms(A) Max(Typ.)	Marking
HPPC04011-1R0M-A8	1.0	20	1	38.5(35)	5.4(6.0)	4.3(4.8)	1R0

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

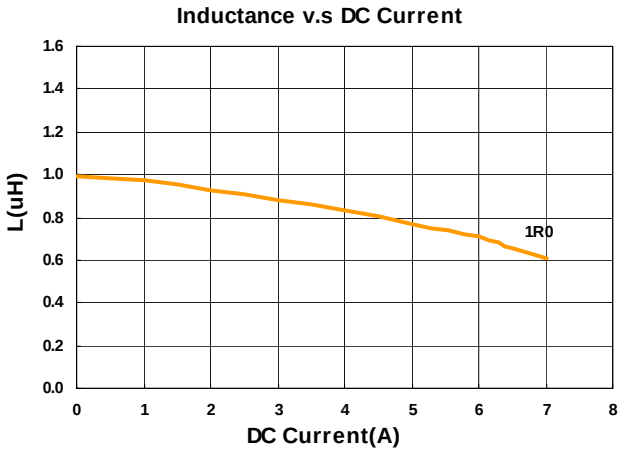
- Operating temperature range - 55℃ ~ 125℃(Including self - temperature rise)
- Isat for Inductance drop 30% from its value with current
- Irms for a 40℃ temperature rise from 25℃ ambient with current
- Measure Equipment：

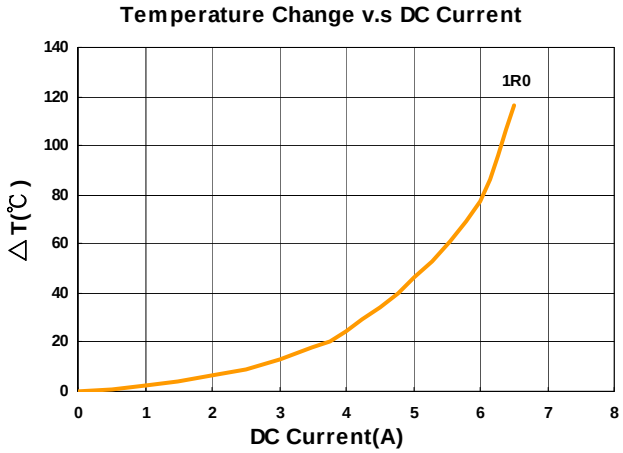
  L：WK 3260B or WK 6500P, 1MHz 0.5V

  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 (MHz)	RDC(mΩ) Max(Typ.)	Isat(A) Max(Typ.)	Irms(A) Max(Typ.)	Marking
HPPC04020-R22M-Q8	0.22	20	1	5.5(5.0)	18(20)	10(11)	R22
HPPC04020-1R0M-Q8	1.0	20	1	17(16)	8.0(8.5)	5.5(6.0)	1R0
HPPC04020-2R2M-Q8	2.2	20	1	38.5(35)	6.0(6.5)	4.0(4.5)	2R2
HPPC04020-4R7M-Q8	4.7	20	1	85(77)	4.0(4.5)	2.5(2.8)	4R7

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

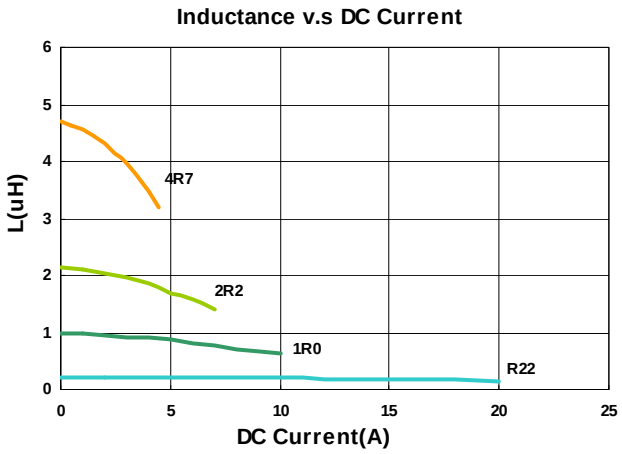
- Operating temperature range - 55℃ ~ 125℃(Including self - temperature rise)
- Isat for Inductance drop 30% from its value with current
- Irms for a 40℃ temperature rise from 25℃ ambient with current
- Measure Equipment：

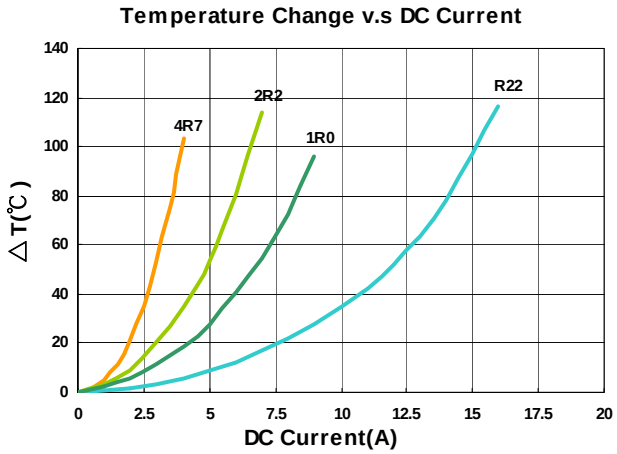
  L：WK 3260B or WK 6500P, 1MHz 0.5V

  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 (MHz)	RDC(mΩ) Max(Typ.)	Isat(A) Max(Typ.)	Irms(A) Max(Typ.)	Marking
HPPC05011-1R0M-A8	1.0	20	1	33(30)	7.0(7.5)	4.8(5.3)	1R0

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

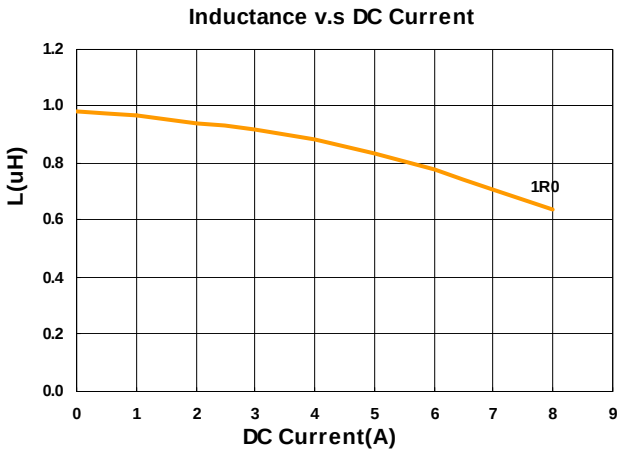
- Operating temperature range - 55℃ ~ 125℃(Including self - temperature rise)
- Isat for Inductance drop 30% from its value with current
- Irms for a 40℃ temperature rise from 25℃ ambient with current
- Measure Equipment：

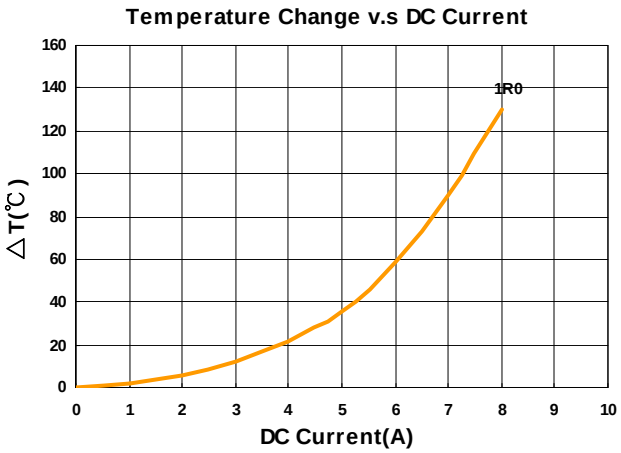
  L：WK 3260B or WK 6500P, 1MHz 0.5V

  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 (MHz)	RDC(mΩ) Max(Typ.)	Isat(A) Max(Typ.)	Irms(A) Max(Typ.)	Marking
HPPC05030-R22M-Q8	0.22	20	1	3.90(3.5)	28(32)	18.0(20.0)	R22
HPPC05030-R36M-Q8	0.36	20	1	4.95(4.5)	23(25)	12.5(13.5)	R36
HPPC05030-R68M-Q8	0.68	20	1	6.30(5.7)	17(18)	11.0(12.0)	R68
HPPC05030-1R0M-Q8	1.0	20	1	9.8(8.9)	16(18)	9.00(9.50)	1R0
HPPC05030-1R5M-Q8	1.5	20	1	15(13.5)	12.5(13.5)	7.50(8.0)	1R5
HPPC05030-2R2M-Q8	2.2	20	1	20(18)	11.5(12.5)	6.00(6.5)	2R2
HPPC05030-4R7M-Q8	4.7	20	1	40(37)	6.5(7.50)	4.50(5.0)	4R7

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

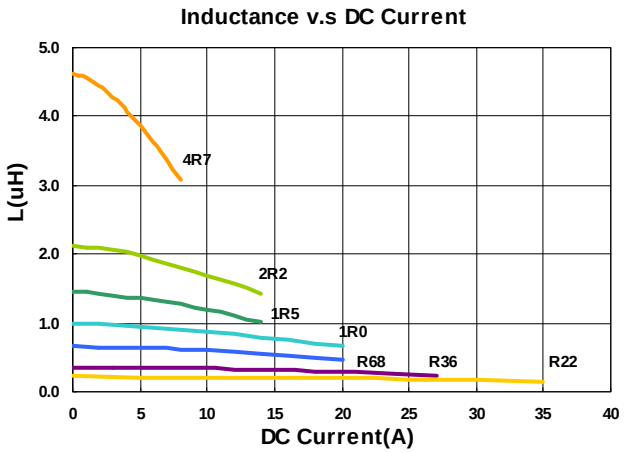
- Operating temperature range - 55℃ ~ 125℃(Including self - temperature rise)
- Isat for Inductance drop 30% from its value with current
- Irms for a 40℃ temperature rise from 25℃ ambient with current
- Measure Equipment：

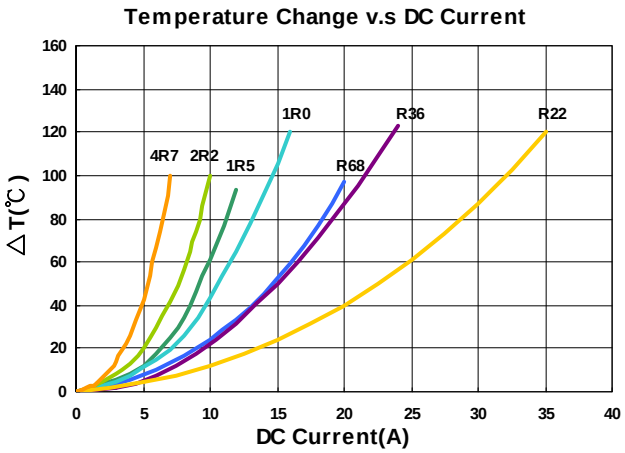
  L：WK 3260B or WK 6500P, 1MHz 0.5V

  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 (MHz)	RDC(mΩ) Max(Typ.)	Isat(A) Max(Typ.)	Irms(A) Max(Typ.)	Marking
HPPC06011-1R0M-A8	1.0	20	1	26(24.5)	7.0(7.8)	6.8(7.3)	1R0

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

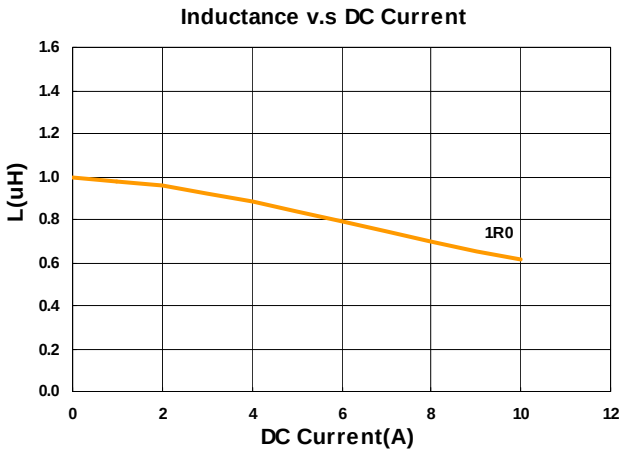
- Operating temperature range - 55℃ ~ 125℃(Including self - temperature rise)
- Isat for Inductance drop 30% from its value with current
- Irms for a 40℃ temperature rise from 25℃ ambient with current
- Measure Equipment：

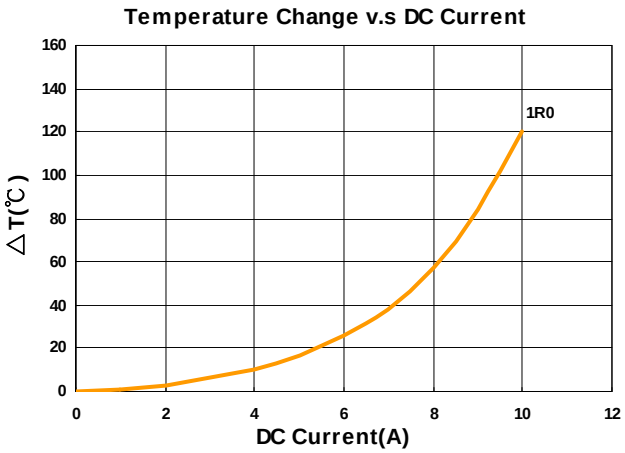
  L：WK 3260B or WK 6500P, 1MHz 0.5V

  RDC：CHEN HWA 502 or CHEN HWA 46502B

  Irms：CHROMA 1810

Test Instruments：WK3260B Impedance / Material Analyzer





CHILISIN ELECTRONICS CORP.

Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	RDC(mΩ) Max(Typ.)	Isat(A) Max(Typ.)	Irms(A) Max(Typ.)	Marking
HPPC06020-4R7M-Q8	4.7	20	1	48(43.7)	6.0(6.8)	4.2(4.7)	4R7

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

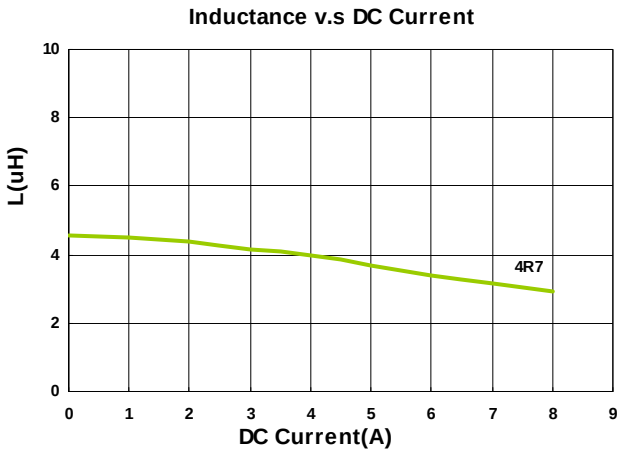
- Operating temperature range - 55℃ ~ 125℃(Including self - temperature rise)
- Isat for Inductance drop 30% from its value with current
- Irms for a 40℃ temperature rise from 25℃ ambient with current
- Measure Equipment：

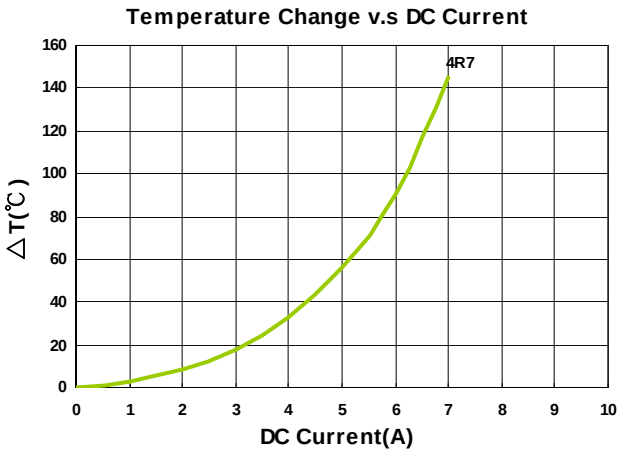
  L：WK 3260B or WK 6500P, 1MHz 0.5V

  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 (MHz)	RDC(mΩ) Max(Typ.)	Isat(A) Max(Typ.)	Irms(A) Max(Typ.)	Marking
HPPC06030-R22M-Q8	0.22	20	1	2.0(1.8)	35(40)	25(27)	R22
HPPC06030-R36M-Q8	0.36	20	1	2.6(2.3)	27(32)	22(25)	R36
HPPC06030-R47M-Q8	0.47	20	1	3.3(2.9)	25(27)	19(20)	R47
HPPC06030-R56M-Q8	0.56	20	1	3.9(3.5)	23(25)	17(18)	R56
HPPC06030-R68M-Q8	0.68	20	1	4.2(3.8)	18(20)	16(17)	R68
HPPC06030-1R0M-Q8	1.0	20	1	5.3(4.8)	17(19)	14(15)	1R0
HPPC06030-1R5M-Q8	1.5	20	1	7.7(7.0)	15(17)	11(11.5)	1R5
HPPC06030-2R2M-Q8	2.2	20	1	9.4(8.5)	12(12.5)	10.5(11)	2R2
HPPC06030-3R3M-Q8	3.3	20	1	15(13.5)	9.0(9.5)	8.0(8.5)	3R3
HPPC06030-4R7M-Q8	4.7	20	1	22.0(20)	6.5(7.0)	6.0(6.5)	4R7
HPPC06030-6R8M-Q8	6.8	20	1	38.5(35)	6.5(7.0)	5.3(5.8)	6R8
HPPC06030-8R2M-Q8	8.2	20	1	40.0(36)	5.0(5.5)	5.0(5.5)	8R2
HPPC06030-100M-Q8	10	20	1	47.0(43)	5.0(5.5)	4.8(5.3)	100

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

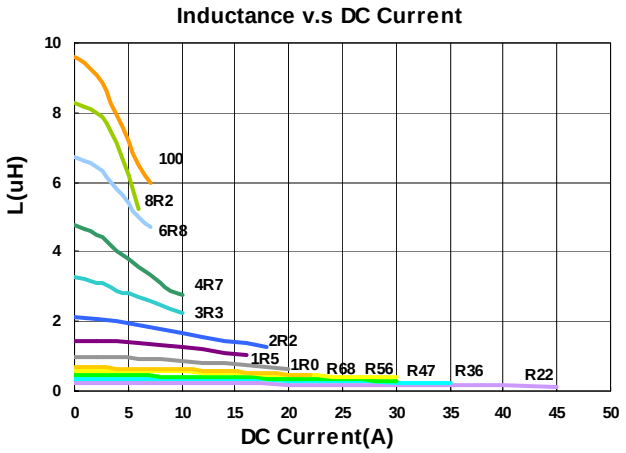
- Operating temperature range - 55℃~125℃(Including self - temperature rise)
- Isat for Inductance drop 30% from its value with current
- Irms for a 40℃ temperature rise from 25℃ ambient with current
- Measure Equipment：

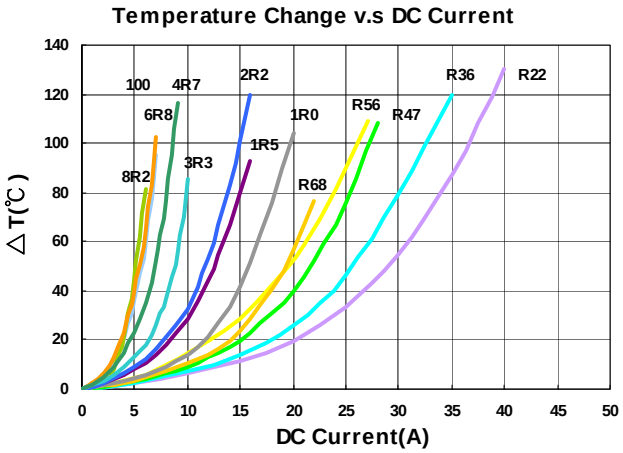
  L：WK 3260B or WK 6500P, 1MHz 0.5V

  RDC：CHEN HWA 502 or CHEN HWA 46502B

  Irms：CHROMA 1810

Test Instruments：WK3260B Impedance / Material Analyzer





CHILISIN ELECTRONICS CORP.

Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	RDC(mΩ) Max(Typ.)	Isat(A) Max(Typ.)	Irms(A) Max(Typ.)	Marking
HPPC10040-R22M-Q8	0.22	20	1	0.54(0.45)	55(60)	40(42)	R22
HPPC10040-R33M-Q8	0.33	20	1	0.68(0.62)	45(50)	32(35)	R33
HPPC10040-R56M-Q8	0.56	20	1	1.2(1.0)	40(45)	28(30)	R56
HPPC10040-R68M-Q8	0.68	20	1	1.5(1.3)	32(37)	25(27)	R68
HPPC10040-1R0M-Q8	1.0	20	1	2.4(2.2)	26(30)	23(25)	1R0
HPPC10040-2R2M-Q8	2.2	20	1	4.7(4.3)	17(20)	15(15.6)	2R2
HPPC10040-3R3M-Q8	3.3	20	1	7.9(7.2)	16(18)	12(12.5)	3R3
HPPC10040-4R7M-Q8	4.7	20	1	10.5(9.5)	13(14)	10.5(11)	4R7
HPPC10040-6R8M-Q8	6.8	20	1	16.5(15)	9.0(10)	8.5(9.0)	6R8
HPPC10040-100M-Q8	10	20	1	24(22)	8.5(9.0)	8.0(8.5)	100

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

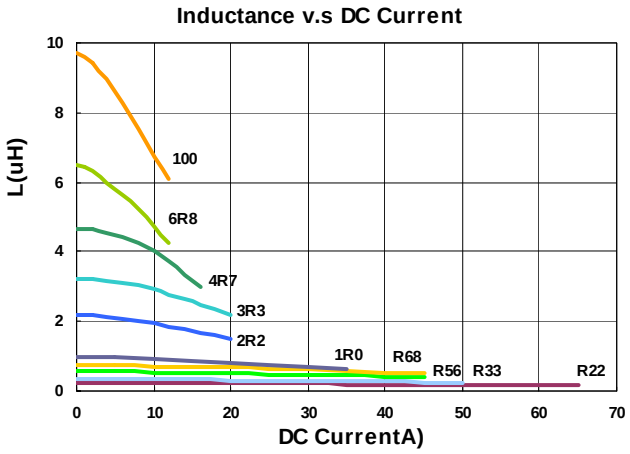
- Operating temperature range - 55℃ ~ 125℃(Including self - temperature rise)
- Isat for Inductance drop 30% from its value with current
- Irms for a 40℃ temperature rise from 25℃ ambient with current
- Measure Equipment：

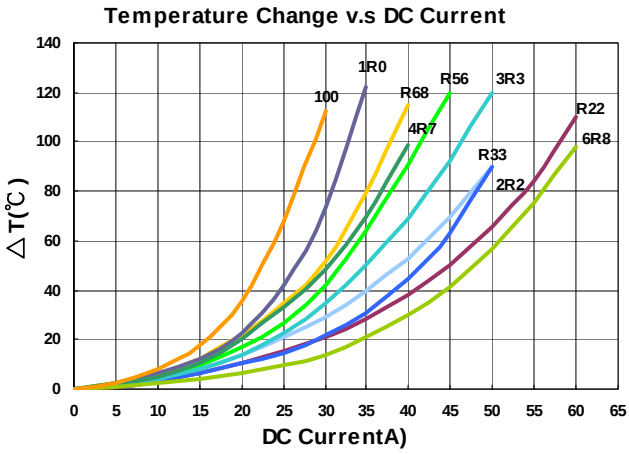
  L：WK 3260B or WK 6500P, 1MHz 0.5V

  RDC：CHEN HWA 502 or CHEN HWA 46502B

  Irms：CHROMA 1810

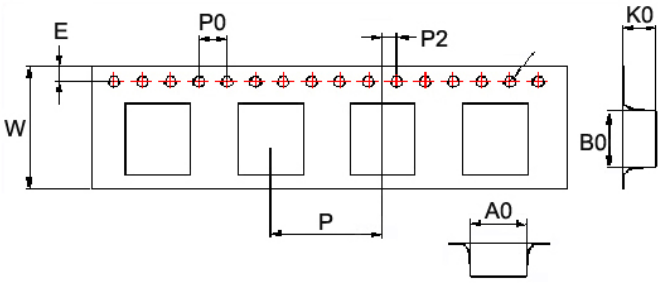
Test Instruments：WK3260B Impedance / Material Analyzer



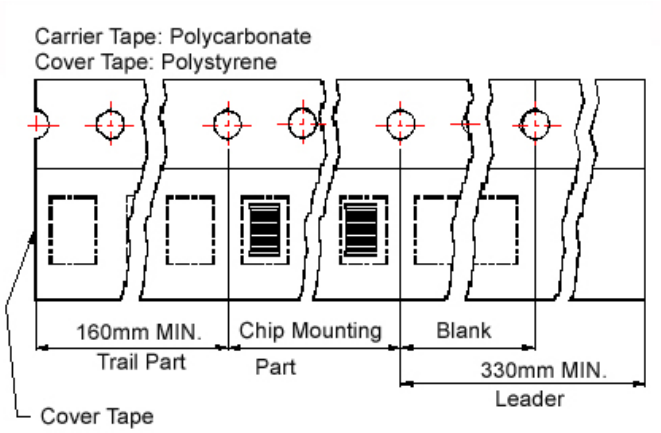


Packaging Specifications

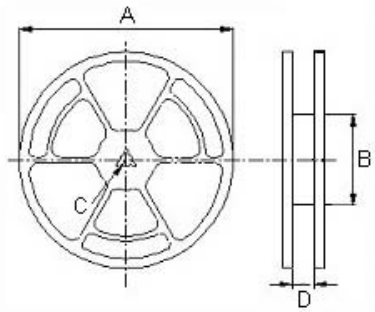
Tape Dimensions



Tape Material



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions									Reel Dimensions				Quantity
	A0	B0	K0	D	E	W	P	P0	P2	A	B	C	D	PCS / REEL
04011	4.4	4.9	1.5	1.55	1.75	12	8	4	2	330	100	13	13.4	2000
04020	4.5	5.1	2.4	1.55	1.75	12	8	4	2	330	100	13	13.4	2000
05011	5.9	6.2	1.5	1.55	1.75	16	12	4	2	330	100	13	16	2000
05030	5.9	6.25	3.4	1.55	1.75	16	16	4	2	330	100	13	16	1000
06011	6.9	7.4	1.5	1.55	1.75	16	12	4	2	330	100	13	16	1000
06020	7.05	7.6	2.4	1.55	1.75	16	16	4	2	330	100	13	16	1000
06030	7.0	7.6	3.4	1.55	1.75	16	16	4	2	330	100	13	16	1000
10040	10.6	11.7	4.25	1.55	1.75	24	16	4	2	330	100	13	24.4	500