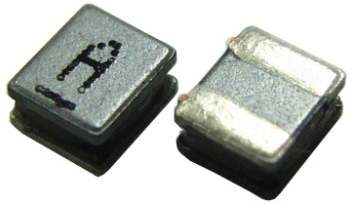
LVT Series



LVT series, an automatic assembly constructed power inductor, is shielded with magnetic resin and suitable for portable DC-DC converter applications.

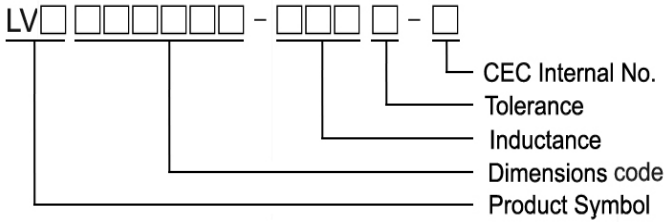
Features

- RoHS compliant
- Low DC resistance and high current
- Highly accurate dimensions
- Superior EMI characteristics electrical with ultra low radiation comparing to conventional shielded power inductors
- Halogen free

Applications

- Smartphone
- DSC
- Tablet PC and other portable devices
- DC/DC converters

Product Identification



Shape and Dimensions

Figure 1

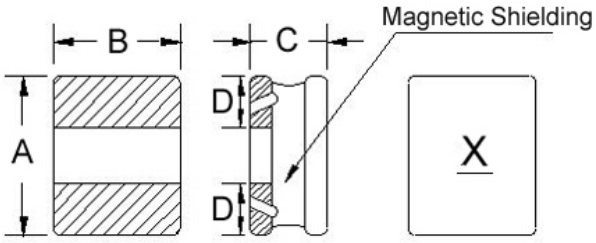
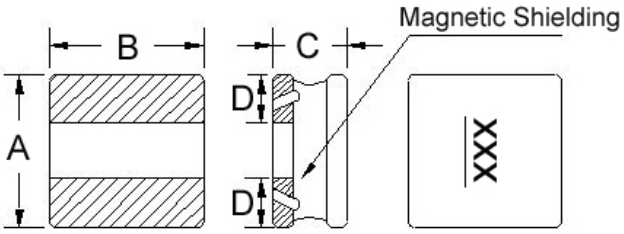


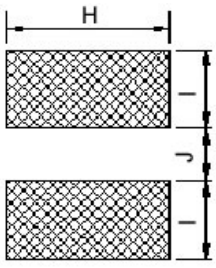
Figure 2



Dimensions in mm

TYPE	FIG	A	B	C	D	H	I	J
LVT201B10	1	2.0±0.25	1.6±0.25	1.02 Max	0.6	1.8	0.80	0.8
LVT252A10	1	2.5±0.25	2.0±0.25	1.02 Max	0.8	2.2	0.85	0.8
LVT252A12	1	2.5±0.25	2.0±0.25	1.2±0.05	0.8	2.2	0.85	0.8
LVT303010	2	3.0±0.20	3.0±0.20	1.02 Max	1.0	3.2	1.1	1.0
LVT303012	2	3.0±0.20	3.0±0.20	1.20 Max	1.0	3.2	1.1	1.0
LVT404012	2	4.0±0.20	4.0±0.20	1.2±0.1	1.5	4.2	1.5	1.2

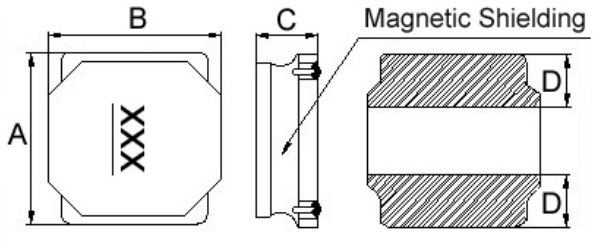
Recommended Pattern



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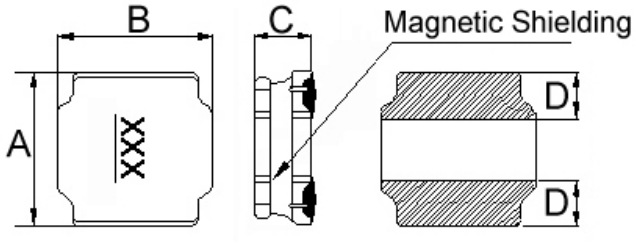
Shape and Dimensions

Figure 3



Recommended Pattern

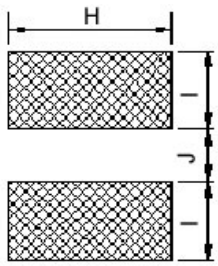
Figure 4



Dimensions in mm

TYPE	FIG	A	B	C	D	H	I	J
LVT404015	3	4.0±0.25	4.0±0.25	1.5±0.2	1.3	3.7	1.5	1.2
LVT404026	3	4.0±0.20	4.0±0.25	2.6±0.2	1.4	3.7	1.2	1.6
LVT505020	4	5.0±0.2	5.0±0.2	2.0±0.2	1.8±0.3	4.2	1.6	2.0
LVT606020	4	6.0±0.2	6.0±0.2	2.0±0.2	1.7±0.3	5.7	1.7	2.8
LVT808040	4	8.0±0.2	8.0±0.2	$4.0^{+0.2}_{-0.30}$	2.3±0.3	7.5	2.5	3.4

Recommended Pattern

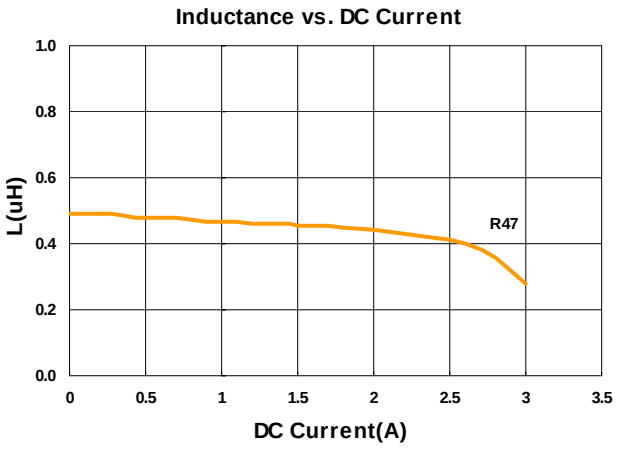


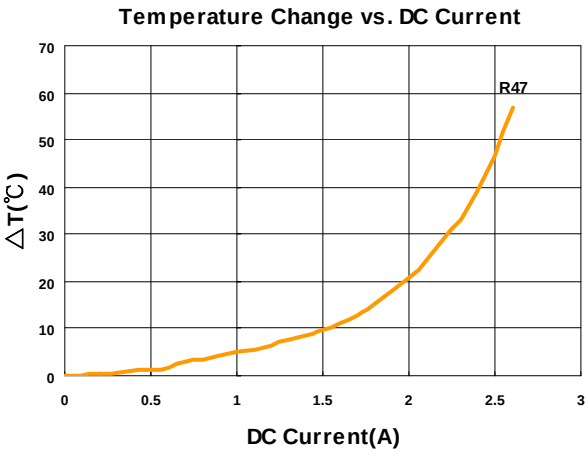
Electrical Characteristics

Part Number	Inductance (uH)	Test Frequency (MHz)	Tolerance (±%)	RDC (mΩ) ±30%	Isat (A) Typ. (Max)	Irms (A) Typ. (Max)	Marking
LVT201B10-R47□-N	0.47	1	20, 30	72	2.4(2.16)	2.4(2.16)	A

- When ordering, please specify tolerance and packaging codes
- Tolerance： T = ±30% , M = ±20%
- L : Agilent/HP4287A+ Agilent/HP16197A, 1MHz 200mV
- RDC : Digital Milliohm Meter Chroma 16502, or equivalent
- Isat & Irms : Agilent/HP4284A, 1MHz 200mV
- Isat for Inductance drop 30% from its value without current
- Irms for a 40℃ rise above 25℃ ambient
- Operating temperature range from -55℃ to 125℃. (Including self - temperature rise)

Test Instruments：HP4284A Material/Impedance Analyzer



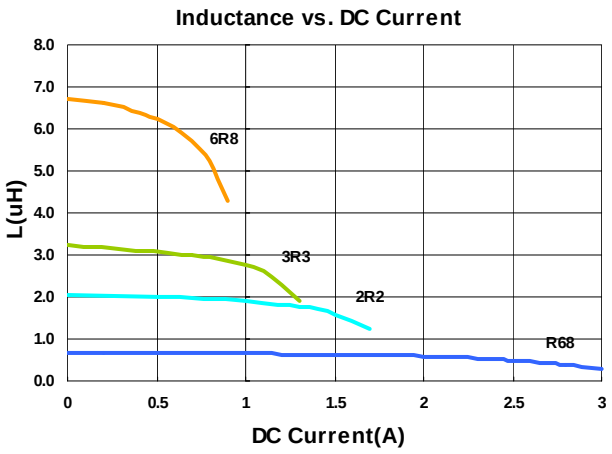


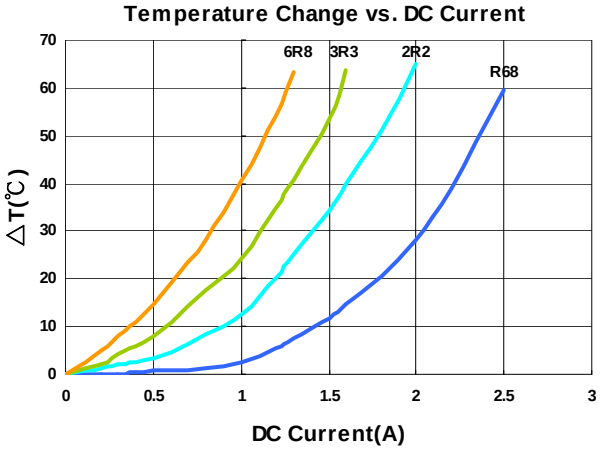
Electrical Characteristics

Part Number	Inductance (uH)	Test Frequency (MHz)	Tolerance (±%)	RDC (Ω) ±30%	Isat (A) Typ. (Max)	Irms (A) Typ. (Max)	Marking
LVT252A10-R68□-N	0.68	1	20, 30	0.050	2.40(2.160)	2.20(1.980)	K
LVT252A10-2R2□-N	2.2	1	20, 30	0.135	1.42(1.278)	1.55(1.395)	D
LVT252A10-3R3□-N	3.3	1	20, 30	0.220	1.12(1.008)	1.20(1.080)	E
LVT252A10-6R8□-N	6.8	1	20, 30	0.435	0.78(0.702)	0.84(0.756)	G

- When ordering, please specify tolerance and packaging codes
- Tolerance： T = ±30% , M = ±20%
- L : Agilent/HP4287A+ Agilent/HP16197A, 1MHz 200mV
- RDC : Digital Milliohm Meter Chroma 16502, or equivalent
- Isat & Irms : Agilent/HP4284A, 1MHz 200mV
- Isat for Inductance drop 30% from its value without current
- Irms for a 40℃ rise above 25℃ ambient
- Operating temperature range from -55℃ to 125℃. (Including self - temperature rise)

Test Instruments：HP4284A Material/Impedance Analyzer





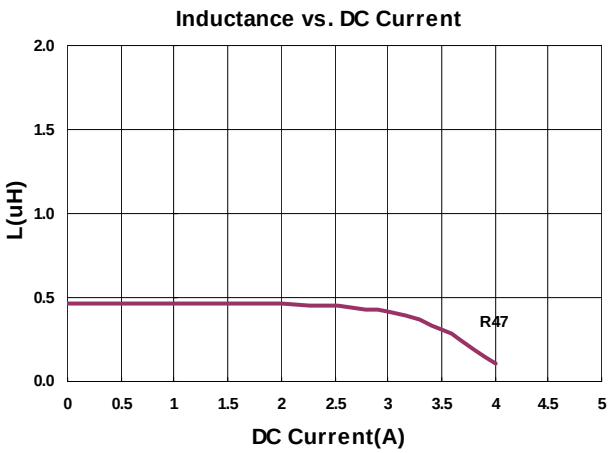
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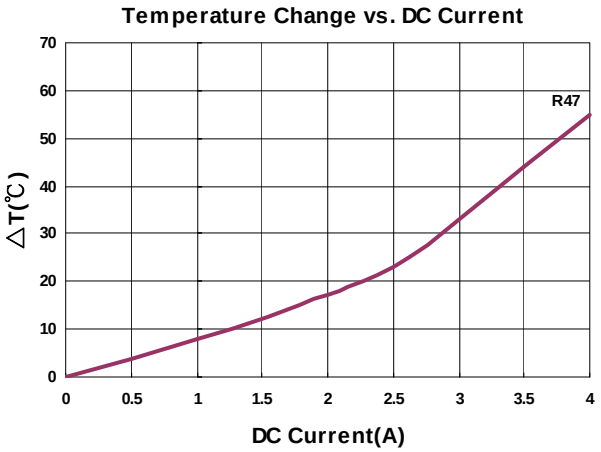
Electrical Characteristics

Part Number	Inductance (uH)	Test Frequency (MHz)	Tolerance (±%)	RDC (Ω) ±30%	Isat (A) Typ. (Max)	Irms (A) Typ. (Max)	Marking
LVT252A12-R47□-N	0.47	1	20, 30	0.027	3.70(3.330)	3.10(2.790)	A

- When ordering, please specify tolerance and packaging codes
- Tolerance： T = ±30% , M = ±20%
- L : Agilent/HP4287A+ Agilent/HP16197A, 1MHz 200mV
- RDC : Digital Milliohm Meter Chroma 16502, or equivalent
- Isat & Irms : Agilent/HP4284A, 1MHz 200mV
- Isat for Inductance drop 30% from its value without current
- Irms for a 40℃ rise above 25℃ ambient
- Operating temperature range from -55℃ to 125℃. (Including self - temperature rise)

Test Instruments：HP4284A Material/Impedance Analyzer



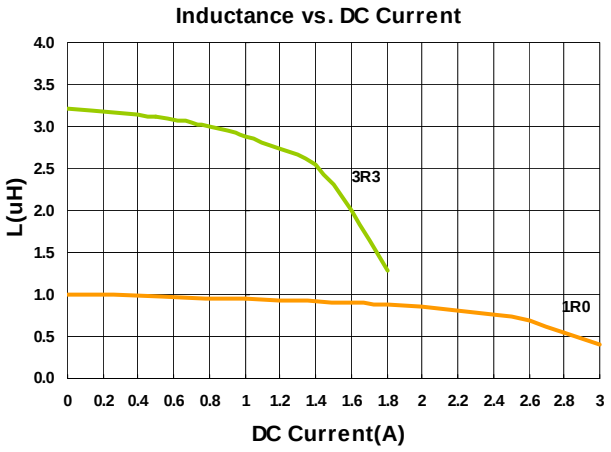


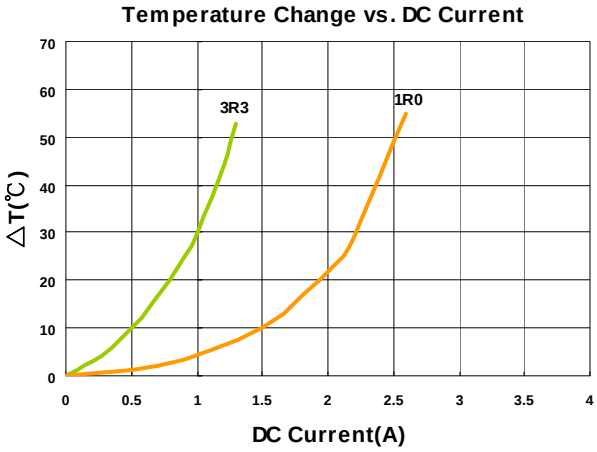
Electrical Characteristics

Part Number	Inductance (uH)	Test Frequency (MHz)	Tolerance (±%)	RDC (Ω) ±30%	Isat (A) Typ. (Max)	Irms (A) Typ. (Max)	Marking
LVT303010-1R0□-N	1.0	1	20, 30	0.063	2.4(2.16)	2.3(2.07)	1R0
LVT303010-3R3□-N	3.3	1	20, 30	0.165	1.2(1.08)	1.1(0.99)	3R3

- When ordering, please specify tolerance and packaging codes
- Tolerance： T = ±30% , M = ±20%
- L : Agilent/HP4287A+ Agilent/HP16197A, 1MHz 200mV
- RDC : Digital Milliohm Meter Chroma 16502, or equivalent
- Isat & Irms : Agilent/HP4284A, 1MHz 200mV
- Isat for Inductance drop 30% from its value without current
- Irms for a 40℃ rise above 25℃ ambient
- Operating temperature range from -55℃ to 125℃. (Including self - temperature rise)

Test Instruments：HP4284A Material/Impedance Analyzer



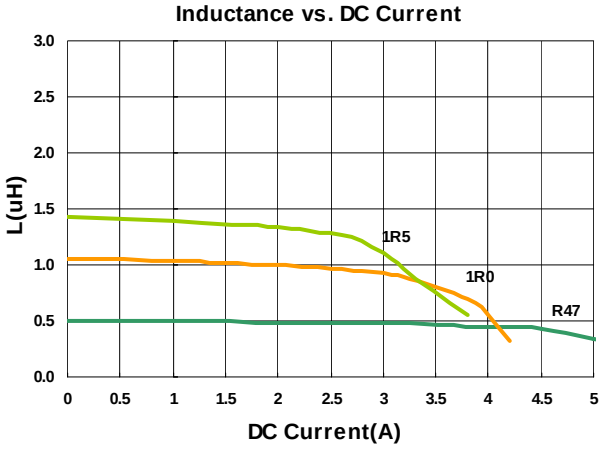


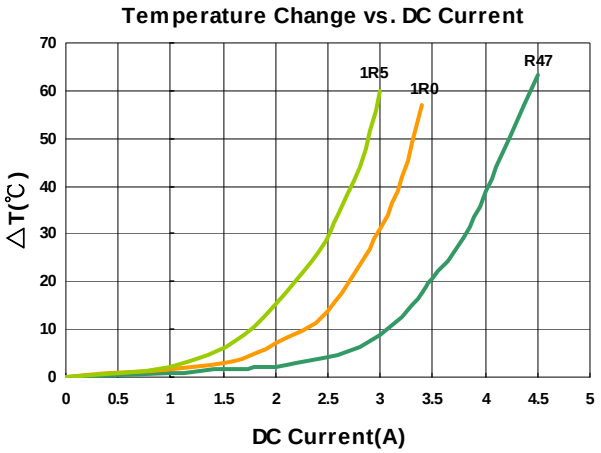
Electrical Characteristics

Part Number	Inductance (uH)	Test Frequency (MHz)	Tolerance (±%)	RDC (Ω) ±30%	Isat (A) Typ. (Max)	Irms (A) Typ. (Max)	Marking
LVT303012-R47□-N	0.47	1	20, 30	0.032	4.3(3.87)	4.0(3.60)	R47
LVT303012-1R0□-N	1.0	1	20, 30	0.060	3.1(2.79)	3.0(2.70)	1R0
LVT303012-1R5□-N	1.5	1	20, 30	0.072	2.7(2.43)	2.6(2.34)	1R5

- When ordering, please specify tolerance and packaging codes
- Tolerance： T = ±30% , M = ±20%
- L : Agilent/HP4287A+ Agilent/HP16197A, 1MHz 200mV
- RDC : Digital Milliohm Meter Chroma 16502, or equivalent
- Isat & Irms : Agilent/HP4284A, 1MHz 200mV
- Isat for Inductance drop 30% from its value without current
- Irms for a 40℃ rise above 25℃ ambient
- Operating temperature range from -55℃ to 125℃. (Including self - temperature rise)

Test Instruments：HP4284A Material/Impedance Analyzer



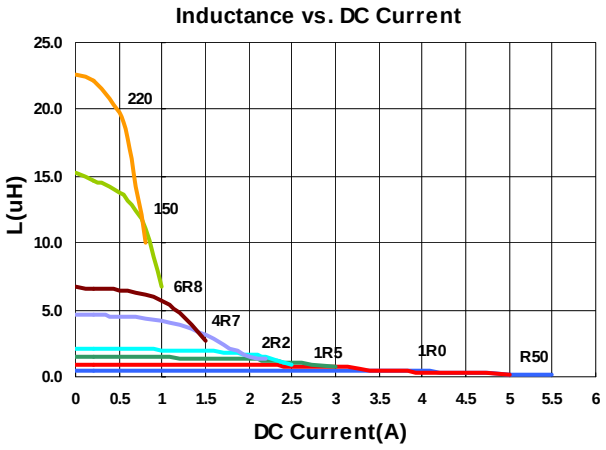


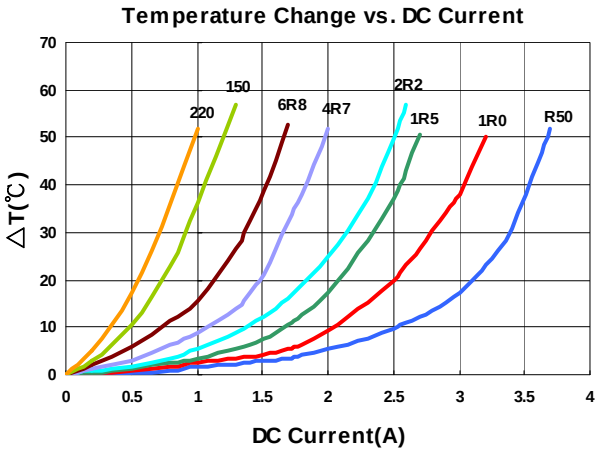
Electrical Characteristics

Part Number	Inductance (uH)	Test Frequency (MHz)	Tolerance (±%)	RDC (Ω) ±30%	Isat (A) Typ. (Max)	Irms (A) Typ. (Max)	Marking
LVT404012-R50□-N	0.5	1	20, 30	0.030	3.90(3.51)	3.50(3.15)	R50
LVT404012-1R0□-N	1.0	1	20, 30	0.040	2.90(2.61)	3.00(2.70)	1R0
LVT404012-1R5□-N	1.5	1	20, 30	0.051	2.30(2.07)	2.50(2.25)	1R5
LVT404012-2R2□-N	2.2	1	20, 30	0.060	1.90(1.71)	2.30(2.07)	2R2
LVT404012-4R7□-N	4.7	1	20, 30	0.094	1.32(1.18)	1.80(1.62)	4R7
LVT404012-6R8□-N	6.8	1	20, 30	0.135	1.08(0.97)	1.50(1.35)	6R8
LVT404012-150□-N	15	1	20, 30	0.260	0.78(0.70)	1.00(0.90)	150
LVT404012-220□-N	22	1	20, 30	0.390	0.62(0.55)	0.80(0.72)	220

- When ordering, please specify tolerance and packaging codes
- Tolerance： T = ±30% , M = ±20%
- L : Agilent/HP4287A+ Agilent/HP16197A, 1MHz 200mV
- RDC : Digital Milliohm Meter Chroma 16502, or equivalent
- Isat & Irms : Agilent/HP4284A, 1MHz 200mV
- Isat for Inductance drop 30% from its value without current
- Irms for a 40℃ rise above 25℃ ambient
- Operating temperature range from -55℃ to 125℃. (Including self - temperature rise)

Test Instruments：HP4284A Material/Impedance Analyzer



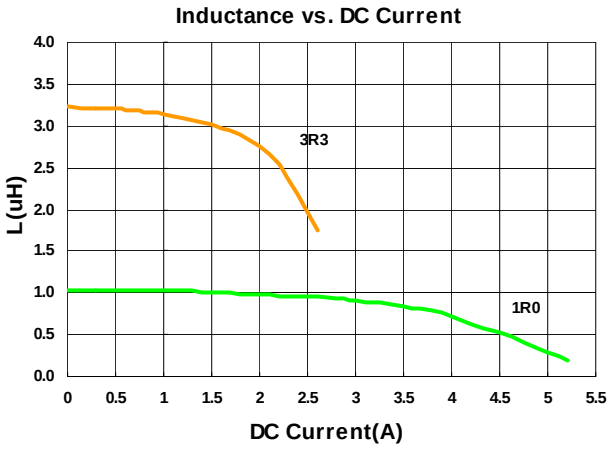


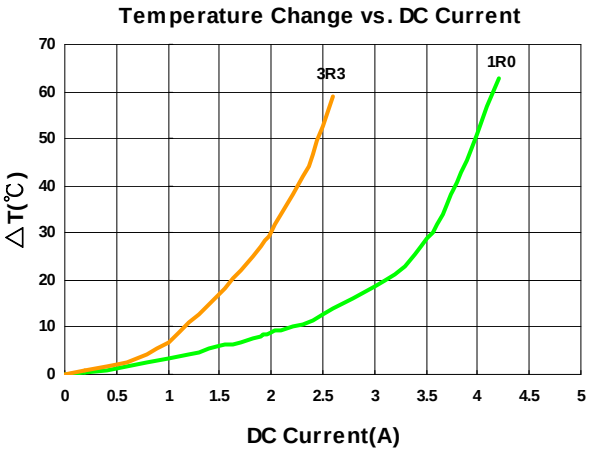
Electrical Characteristics

Part Number	Inductance (uH)	Test Frequency (MHz)	Tolerance (±%)	RDC (Ω) ±30%	Isat (A) Typ. (Max)	Irms (A) Typ. (Max)	Marking
LVT404015-1R0□-N	1.0	1	20, 30	0.034	3.60(3.24)	3.70(3.33)	1R0
LVT404015-3R3□-N	3.3	1	20, 30	0.080	2.00(1.80)	2.20(1.98)	3R3

- When ordering, please specify tolerance and packaging codes
- Tolerance： T = ±30% , M = ±20%
- L : Agilent/HP4287A+ Agilent/HP16197A, 1MHz 200mV
- RDC : Digital Milliohm Meter Chroma 16502, or equivalent
- Isat & Irms : Agilent/HP4284A, 1MHz 200mV
- Isat for Inductance drop 30% from its value without current
- Irms for a 40℃ rise above 25℃ ambient
- Operating temperature range from -55℃ to 125℃. (Including self - temperature rise)

Test Instruments：HP4284A Material/Impedance Analyzer





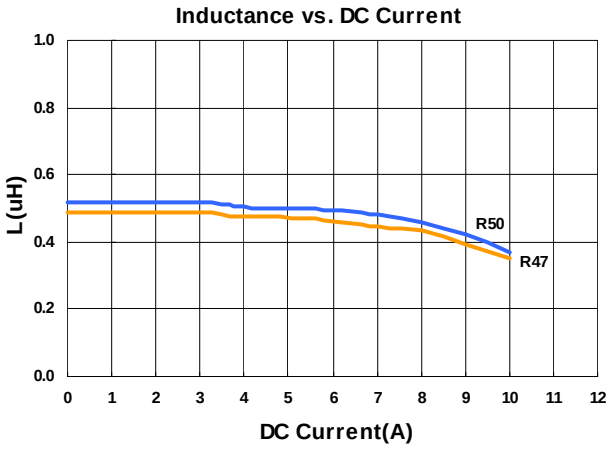
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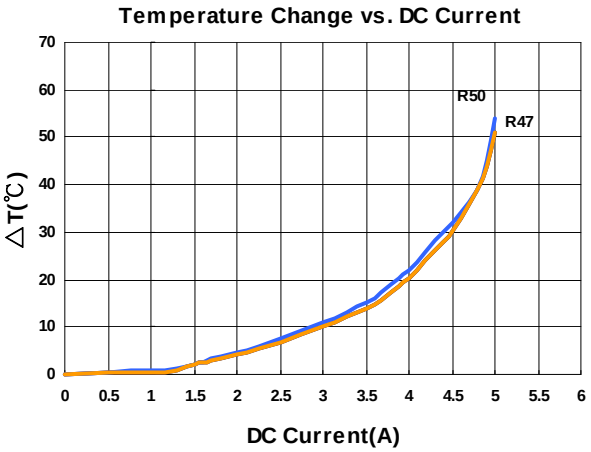
Electrical Characteristics

Part Number	Inductance (uH)	Test Frequency (KHz)	Tolerance (±%)	RDC (Ω) ±30%	Isat (A) Typ. (Max)	Irms (A) Typ. (Max)	Marking
LVT404026-R47□-N	0.47	100	20, 30	0.024	7.20(6.48)	4.80(4.32)	R47
LVT404026-R50□-N	0.50	100	20, 30	0.024	7.20(6.48)	4.80(4.32)	R50

- When ordering, please specify tolerance and packaging codes
- Tolerance： T = ±30% , M = ±20%
- L : Agilent/HP4284A+ Agilent/HP16334A, 100KHz ,1V
- RDC : Digital Milliohm Meter Chroma 16502, or equivalent
- Isat & Irms : Agilent/HP4284A, 100KHz 1V
- Isat for Inductance drop 30% from its value without current
- Irms for a 40℃ rise above 25℃ ambient
- Operating temperature range from -55℃ to 125℃. (Including self - temperature rise)

Test Instruments：HP4284A Material/Impedance Analyzer



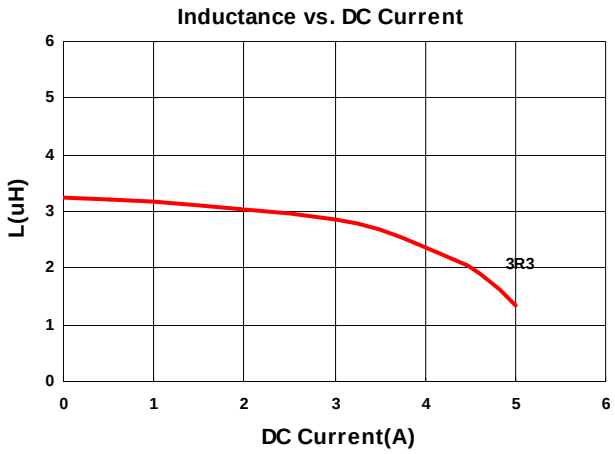


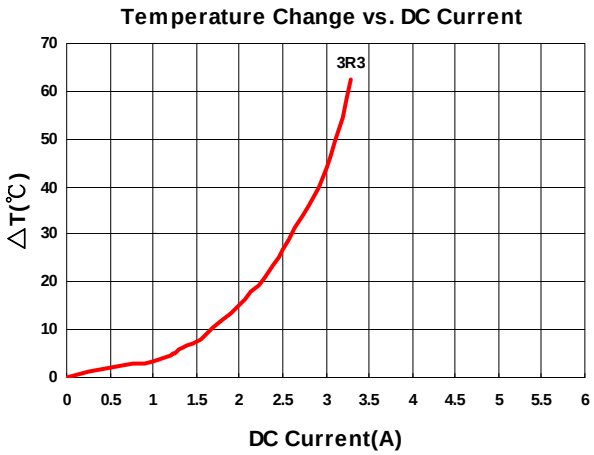
Electrical Characteristics

Part Number	Inductance (uH)	Test Frequency (KHz)	Tolerance (±%)	RDC (Ω) ±30%	Isat (A) Typ. (Max)	Irms (A) Typ. (Max)	Marking
LVT505020-3R3□-N	3.3	100	20, 30	0.050	3.4(3.06)	2.7(2.43)	3R3

- When ordering, please specify tolerance and packaging codes
- Tolerance： T = ±30% , M = ±20%
- L : Agilent/HP4284A+ Agilent/HP16334A, 100KHz 1V
- RDC : Digital Milliohm Meter Chroma 16502, or equivalent
- Isat & Irms : Agilent/HP4284A, 100KHz 1V
- Isat for Inductance drop 30% from its value without current
- Irms for a 40℃ rise above 25℃ ambient
- Operating temperature range from -55℃ to 125℃. (Including self - temperature rise)

Test Instruments：HP4284A Material/Impedance Analyzer





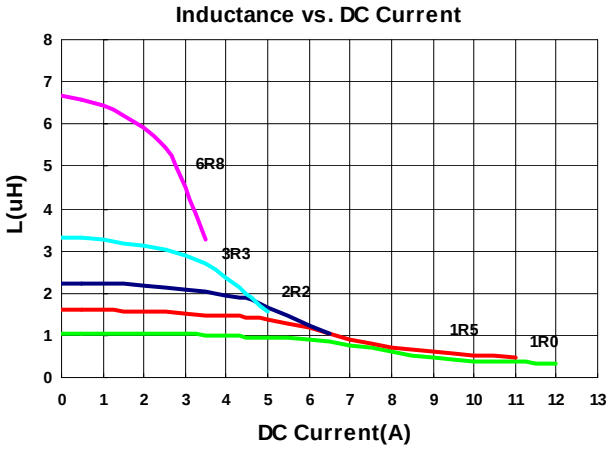
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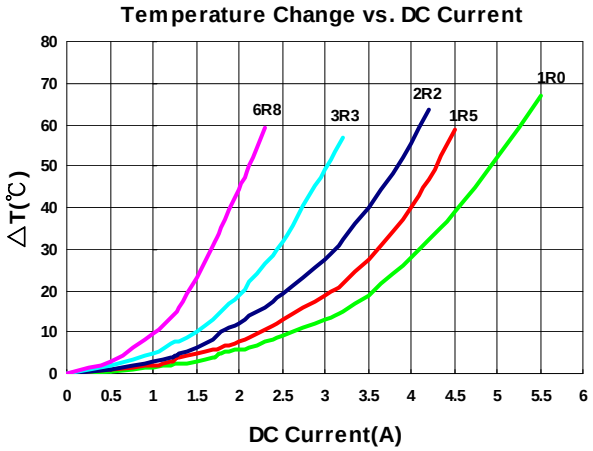
Electrical Characteristics

Part Number	Inductance (uH)	Test Frequency (KHz)	Tolerance (±%)	RDC (Ω) ±30%	Isat (A) Typ. (Max)	Irms (A) Typ. (Max)	Marking
LVT606020-1R0□-N	1.0	100	20, 30	0.019	6.4(5.76)	4.2(3.78)	1R0
LVT606020-1R5□-N	1.5	100	20, 30	0.026	5.4(4.86)	3.7(3.33)	1R5
LVT606020-2R2□-N	2.2	100	20, 30	0.034	4.5(4.05)	3.3(2.97)	2R2
LVT606020-3R3□-N	3.3	100	20, 30	0.045	3.6(3.24)	2.8(2.52)	3R3
LVT606020-6R8□-N	6.8	100	20, 30	0.085	2.6(2.34)	1.9(1.71)	6R8

- When ordering, please specify tolerance and packaging codes
- Tolerance： T = ±30% , M = ±20%
- L : Agilent/HP4284A+ Agilent/HP16334A, 100KHz 1V
- RDC : Digital Milliohm Meter Chroma 16502, or equivalent
- Isat & Irms : Agilent/HP4284A, 100KHz 1V
- Isat for Inductance drop 30% from its value without current
- Irms for a 40℃ rise above 25℃ ambient
- Operating temperature range from -55℃ to 125℃. (Including self - temperature rise)

Test Instruments：HP4284A Material/Impedance Analyzer





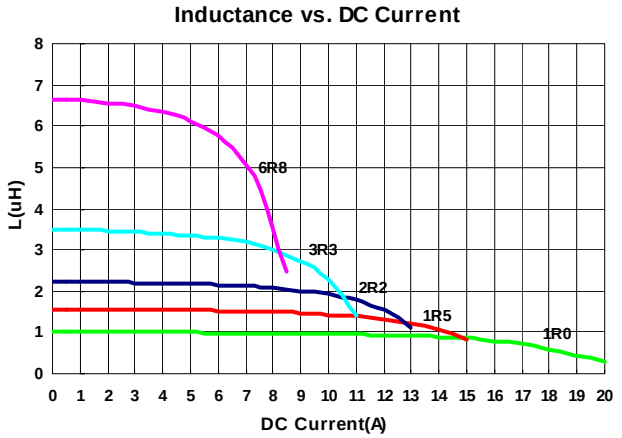
CHILISIN ELECTRONICS CORP.

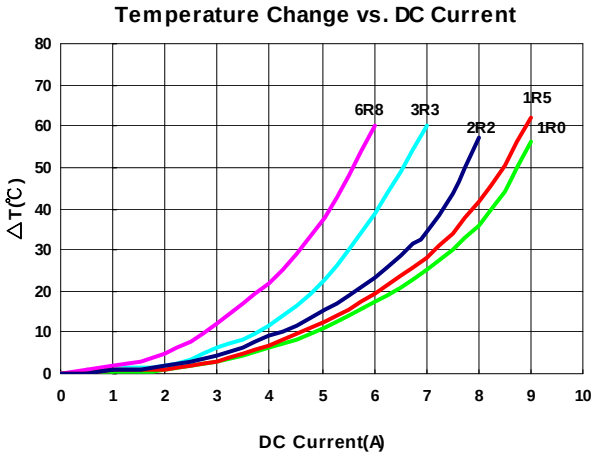
Electrical Characteristics

Part Number	Inductance (uH)	Test Frequency (KHz)	Tolerance (±%)	RDC (Ω) ±30%	Isat (A) Typ. (Max)	Irms (A) Typ. (Max)	Marking
LVT808040-1R0□-N	1.0	100	30	0.0075	13.5(12.15)	8.1(7.29)	1R0
LVT808040-1R5□-N	1.5	100	20, 30	0.0097	10.5(9.45)	7.7(6.93)	1R5
LVT808040-2R2□-N	2.2	100	20, 30	0.012	9.7(8.73)	7.2(6.48)	2R2
LVT808040-3R3□-N	3.3	100	20, 30	0.047	8.0(7.20)	5.9(5.31)	3R3
LVT808040-6R8□-N	6.8	100	20, 30	0.029	5.8(5.22)	4.9(4.41)	6R8

- When ordering, please specify tolerance and packaging codes
- Tolerance： T = ±30% , M = ±20%
- L : Agilent/HP4284A+ Agilent/HP16334A, 100KHz 1V
- RDC : Digital Milliohm Meter Chroma 16502, or equivalent
- Isat & Irms : Agilent/HP4284A, 100KHz 1V
- Isat for Inductance drop 30% from its value without current
- Irms for a 40℃ rise above 25℃ ambient
- Operating temperature range from -55℃ to 125℃. (Including self - temperature rise)

Test Instruments：HP4284A Material/Impedance Analyzer



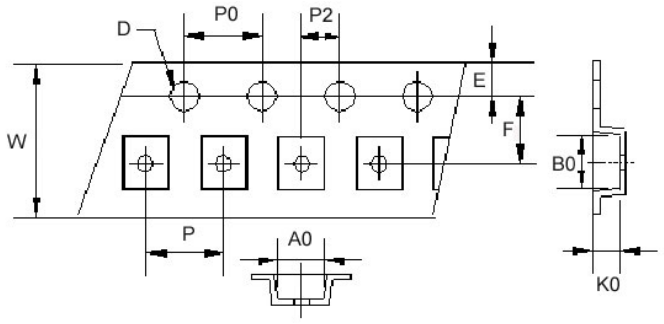


CHILISIN ELECTRONICS CORP.

Packaging Specifications

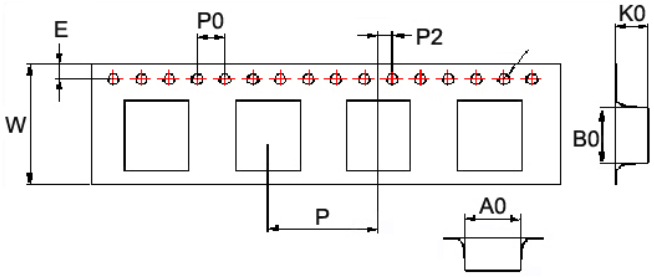
Tape Dimensions

Figure 1



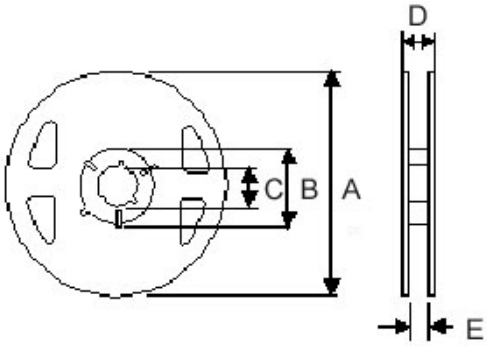
Tape Dimensions

Figure 2



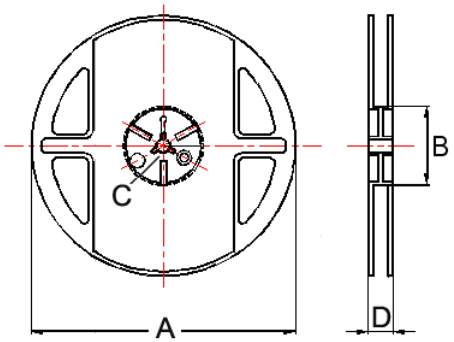
Reel Dimensions

Figure 1



Reel Dimensions

Figure 2



Dimensions in mm

TYPE	Fig	Tape Dimensions										Reel Dimensions					Quantity
		A0	B0	K0	D	E	F	W	P	P0	P2	A	B	C	D	E	PCS / Reel
LVT201B10	1	1.90	2.20	1.15	1.55	1.75	3.5	8	4	4	2	180	60	13	14.4	8.4	2000
LVT252A10	1	2.40	2.70	1.15	1.55	1.75	3.5	8	4	4	2	180	60	13	14.4	8.4	2000
LVT252A12	1	2.40	2.70	1.30	1.55	1.75	3.5	8	4	4	2	180	60	13	14.4	8.4	2000
LVT303010	1	3.20	3.20	1.40	1.55	1.75	3.5	8	4	4	2	180	60	13	14.4	8.4	2000
LVT303012	1	3.20	3.20	1.40	1.55	1.75	3.5	8	4	4	2	180	60	13	14.4	8.4	2000
LVT404012	2	4.25	4.25	1.30	1.55	1.75	5.5	12	8	4	2	178	60	13	13.2	-	1000
LVT404015	2	4.25	4.25	1.70	1.55	1.75	5.5	12	8	4	2	178	60	13	13.2	-	1000
LVT404026	2	4.25	4.25	3.00	1.55	1.75	5.5	12	8	4	2	178	60	13	13.2	-	500
LVT505020	2	5.25	5.25	2.20	1.55	1.75	5.5	12	8	4	2	330	100	13	13.4	-	2000
LVT606020	2	6.25	6.25	2.20	1.55	1.75	7.5	16	8	4	2	330	100	13	17.4	-	2000
LVT808040	2	8.25	8.25	4.15	1.55	1.75	7.5	16	12	4	2	330	100	13	17.4	-	1000