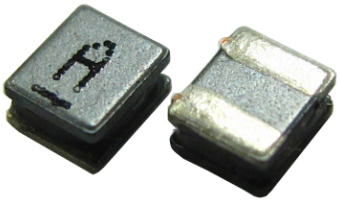
LVH Series



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

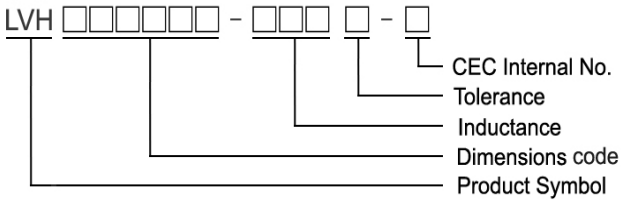
Features

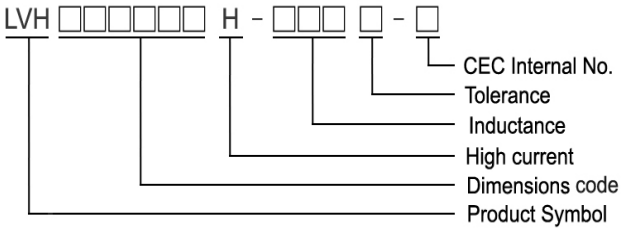
- RoHS compliant
- Low DC resistance and high current
- Highly accurate dimensions
- Superior EMI characteristics with ultra low radiation comparing to conventional shielded power inductors
- Halogen free

Applications

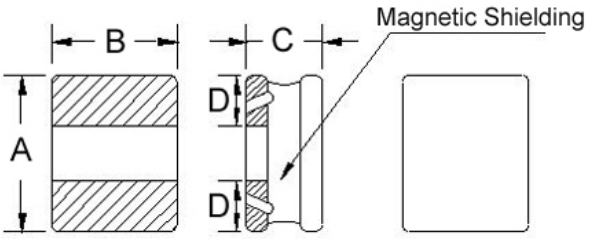
- Smart phone
- DSC
- Tablet PC and other portable devices
- DC/DC converters

Product Identification

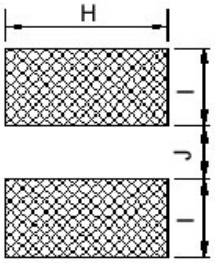




Shape and Dimensions



Recommended Pattern



Dimensions in mm

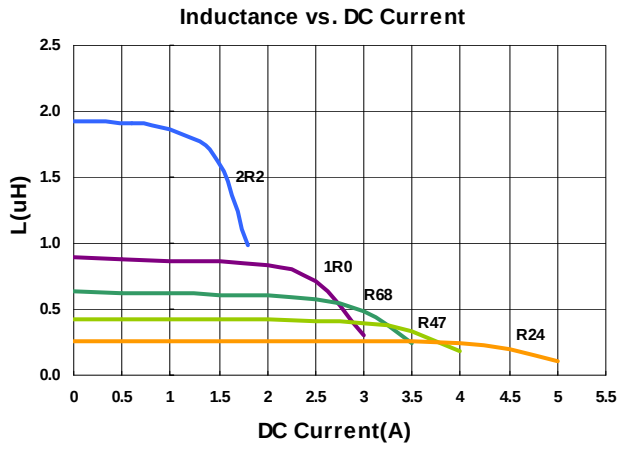
TYPE	A	B	C	D	H	I	J
LVH201B10H	2.0±0.25	1.6±0.25	1.02 Max	0.6	1.8	0.8	0.8
LVH252A10H	2.5±0.25	2.0±0.25	1.02 Max	0.8	2.2	0.85	0.8
LVH252A12	2.5±0.25	2.0±0.25	1.2±0.05	0.8	2.2	0.85	0.8
LVH252A12H	2.5±0.25	2.0±0.25	1.2±0.05	0.8	2.2	0.85	0.8

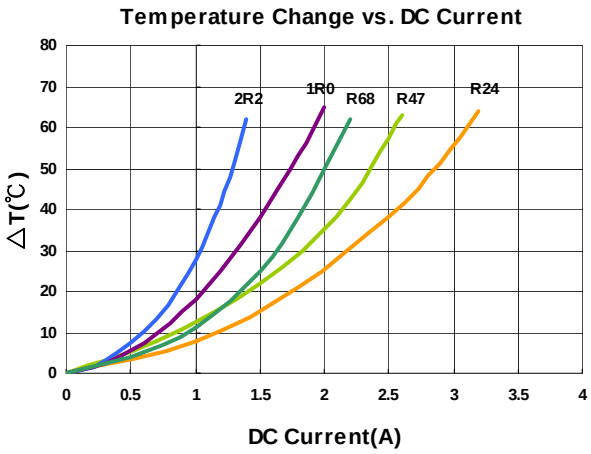
Electrical Characteristics

Part Number	Inductance (uH)	Test Frequency (MHz)	Tolerance (±%)	RDC (Ω) ±30%	Isat (mA) Typ. (Max)	Irms (mA) Typ. (Max)
LVH201B10H-R24□-N	0.24	1	20, 30	0.048	3700(3300)	2500(2100)
LVH201B10H-R33□-N	0.33	1	20, 30	0.048	3400(3000)	2500(2100)
LVH201B10H-R47□-N	0.47	1	20, 30	0.072	2900(2600)	2100(1800)
LVH201B10H-R56□-N	0.56	1	20, 30	0.072	2700(2400)	2100(1800)
LVH201B10H-R68□-N	0.68	1	20, 30	0.092	2500(2200)	1800(1500)
LVH201B10H-1R0□-N	1.0	1	20, 30	0.110	2200(2000)	1500(1200)
LVH201B10H-2R2□-N	2.2	1	20, 30	0.205	1400(1200)	1150(970)
LVH201B10H-4R7□-N	4.7	1	20, 30	0.520	900(800)	800(680)
LVH201B10H-100□-N	10	1	20, 30	1.100	620(550)	450(380)

- 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





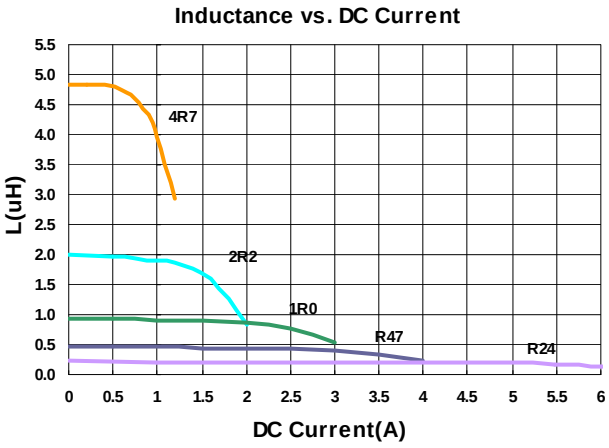
CHILISIN ELECTRONICS CORP.

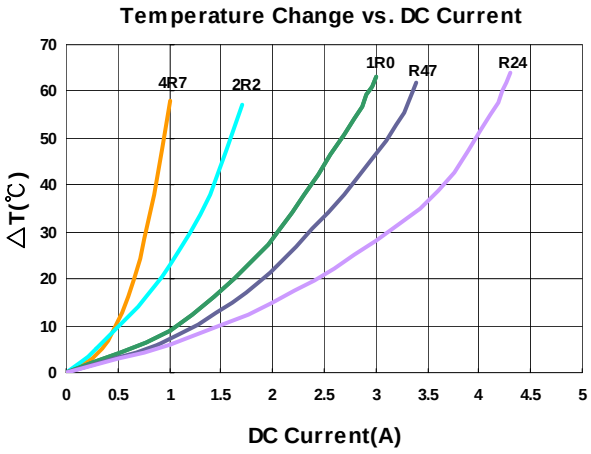
Electrical Characteristics

Part Number	Inductance (uH)	Test Frequency (MHz)	Tolerance (±%)	RDC (Ω) ±30%	Isat (mA) Typ. (Max)	Irms (mA) Typ. (Max)
LVH252A10H-R24□-N	0.24	1	20, 30	0.030	4700(4200)	3600(3000)
LVH252A10H-R47□-N	0.47	1	20, 30	0.043	3300(3000)	2700(2300)
LVH252A10H-R68□-N	0.68	1	20, 30	0.062	2800(2500)	2300(1900)
LVH252A10H-1R0□-N	1.0	1	20, 30	0.080	2300(2100)	1900(1600)
LVH252A10H-2R2□-N	2.2	1	20, 30	0.135	1600(1400)	1400(1100)
LVH252A10H-4R7□-N	4.7	1	20, 30	0.330	1000(900)	850(720)
LVH252A10H-100□-N	10	1	20, 30	0.670	720(640)	580(490)

- 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





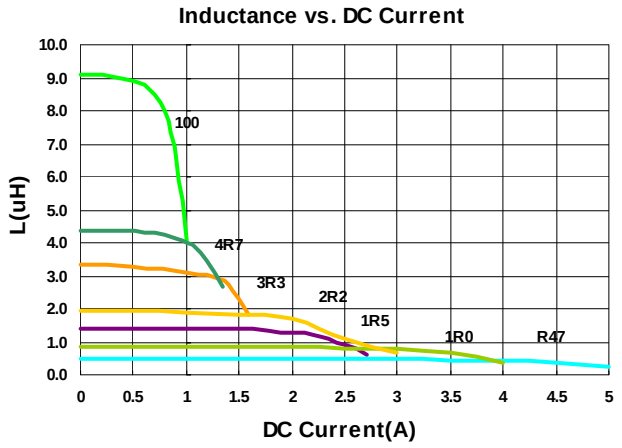
CHILISIN ELECTRONICS CORP.

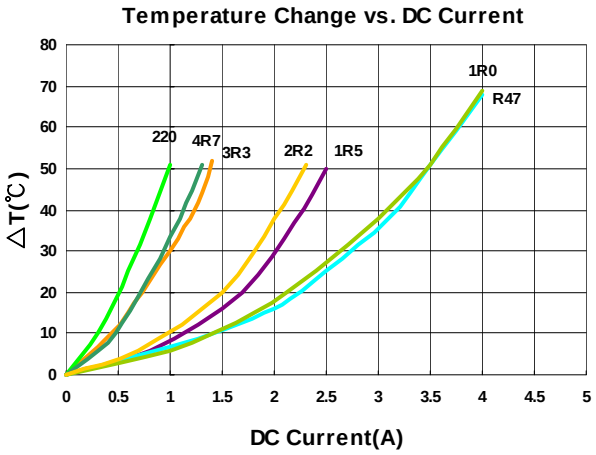
Electrical Characteristics

Part Number	Inductance (uH)	Test Frequency (MHz)	Tolerance (±%)	RDC (Ω) ±30%	Isat (mA) Typ. (Max)	Irms (mA) Typ. (Max)
LVH252A12H-R47□-N	0.47	1	20, 30	0.031	4100(3700)	3100(2600)
LVH252A12H-R68□-N	0.68	1	20, 30	0.031	3100(2900)	3100(2600)
LVH252A12H-1R0□-N	1.0	1	20, 30	0.049	3200(3000)	3000(2500)
LVH252A12H-1R5□-N	1.5	1	20, 30	0.088	2300(2100)	2200(1800)
LVH252A12H-2R2□-N	2.2	1	20, 30	0.099	2200(2000)	2000(1700)
LVH252A12H-3R3□-N	3.3	1	20, 30	0.190	1400(1200)	1200(1000)
LVH252A12H-4R7□-N	4.7	1	20, 30	0.235	1300(1100)	1100(930)
LVH252A12H-100□-N	10	1	20, 30	0.510	920(820)	800(680)

- 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





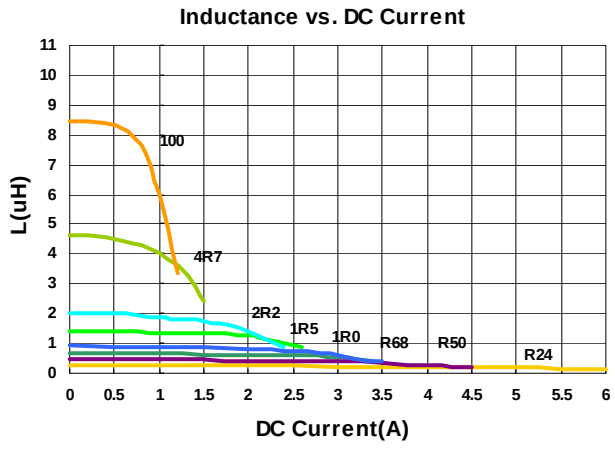
CHILISIN ELECTRONICS CORP.

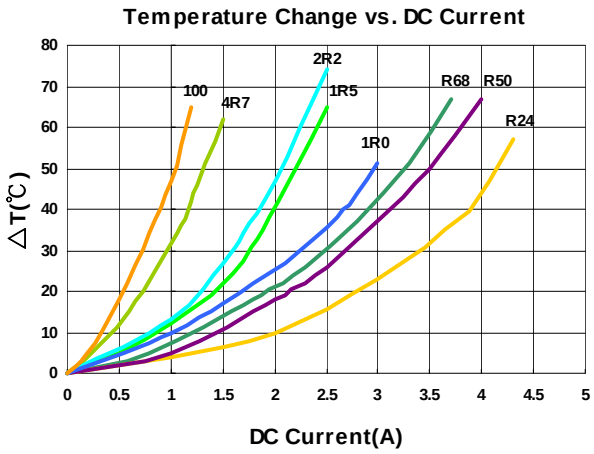
Electrical Characteristics

Part Number	Inductance (uH)	Test Frequency (MHz)	Tolerance (±%)	RDC (Ω) ±30%	Isat (mA) Typ. (Max)	Irms (mA) Typ. (Max)	Marking
LVH252A12-R24□-N	0.24	1	20, 30	0.021	4700(4200)	3800(3200)	E
LVH252A12-R33□-N	0.33	1	20, 30	0.027	4200(3700)	3000(2500)	G
LVH252A12-R50□-N	0.50	1	20, 30	0.027	3600(3400)	3000(2500)	D
LVH252A12-R68□-N	0.68	1	20, 30	0.036	2900(2600)	2800(2300)	H
LVH252A12-1R0□-N	1.0	1	20, 30	0.037	2700(2450)	2600(2200)	A
LVH252A12-1R5□-N	1.5	1	20, 30	0.075	2200(1900)	1900(1600)	I
LVH252A12-2R2□-N	2.2	1	20, 30	0.080	1900(1800)	1800(1500)	B
LVH252A12-4R7□-N	4.7	1	20, 30	0.195	1200(1000)	1100(930)	C
LVH252A12-100□-N	10	1	20, 30	0.400	900(800)	800(680)	F

- 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 -40to 125℃. (Including self - temperature rise)

Test Instruments：HP4284A Material/Impedance Analyzer

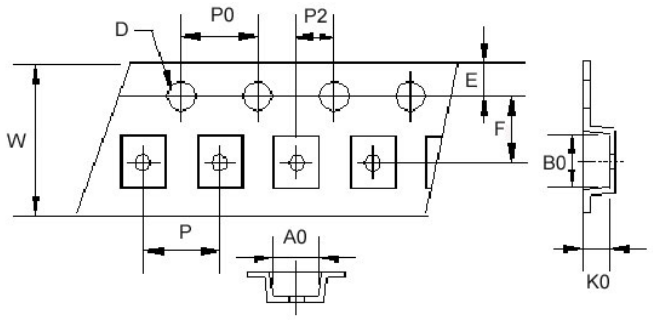




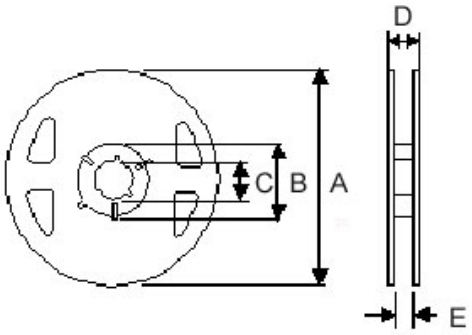
CHILISIN ELECTRONICS CORP.

Packaging Specifications

Tape Dimensions



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions										Reel Dimensions					Quantity
	A0	B0	K0	D	E	F	W	P	P0	P2	A	B	C	D	E	PCS / Reel
LVH201B10H	1.80	2.20	1.15	1.55	1.75	3.5	8.1	4	4	2	180	60	13	14.4	8.4	2000
LVH252A10H	2.30	2.70	1.15	1.55	1.75	3.5	8.1	4	4	2	180	60	13	14.4	8.4	2000
LVH252A12H	2.30	2.70	1.30	1.55	1.75	3.5	8.1	4	4	2	180	60	13	14.4	8.4	2000
LVH252A12	2.30	2.70	1.30	1.55	1.75	3.5	8.1	4	4	2	180	60	13	14.4	8.4	2000