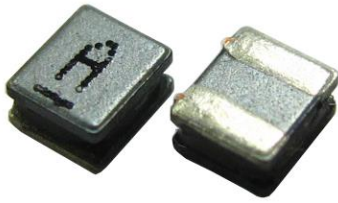


## Cautions and Warnings

Please be noted that this spec is only for reference if you have projects designed with the product number listed in. If you are looking for new project design-in, please find BWVH Series specification/datasheet on Chilisin website. Or you may find our sales contact for more information on old part number at your convenience. Appreciated your attention and understanding.

**Note:** Please be sure to request approval specifications that provide further details of the products. Kindly note that the content of these specifications are subject to change or may be discontinued without prior notice. This product may not be designed/used in medical or high risk applications without Chilisin approval. Please contact our sales department before ordering.

## LVH Series



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

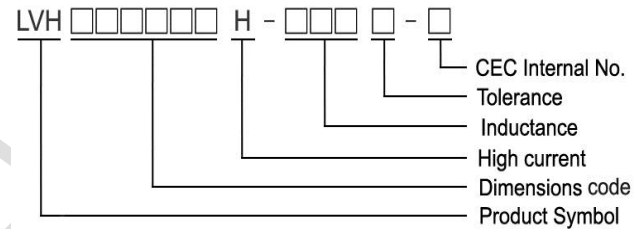
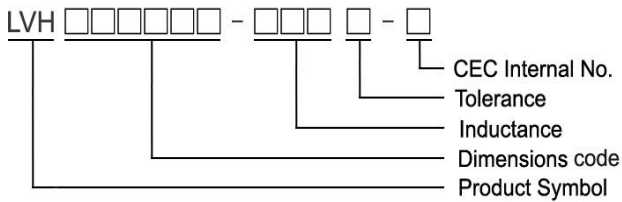
### Features

- RoHS, Halogen Free and REACH Compliance
- Shielded with magnetic resin
- Low profile, miniature package size and wide inductance range.
- Low DCR and high rated current.

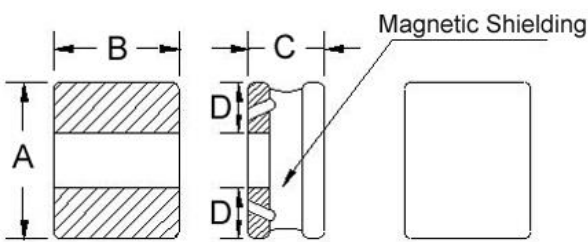
### Applications

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

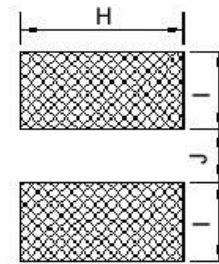
### Product Identification



### 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	1.00 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

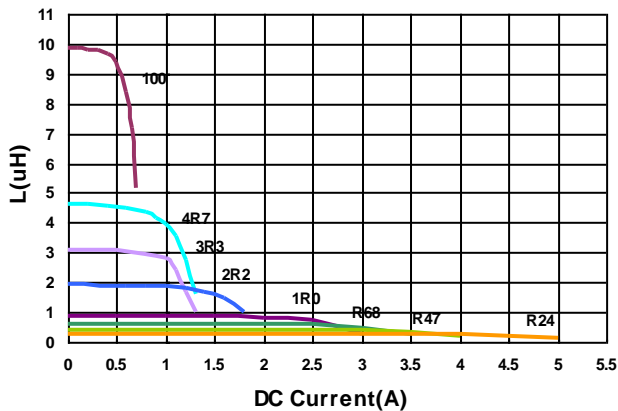
Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	RDC (Ω) ±30%	Isat (mA) Typ. (Max)	Irms (mA) Typ. (Max)
LVH201B10H-R24□-N	0.24	20, 30	1	0.048	3700(3300)	2500(2100)
LVH201B10H-R33□-N	0.33	20, 30	1	0.048	3400(3000)	2500(2100)
LVH201B10H-R47□-N	0.47	20, 30	1	0.072	2900(2600)	2100(1800)
LVH201B10H-R56□-N	0.56	20, 30	1	0.072	2700(2400)	2100(1800)
LVH201B10H-R68□-N	0.68	20, 30	1	0.092	2500(2200)	1800(1500)
LVH201B10H-1R0□-N	1.0	20, 30	1	0.110	2200(2000)	1500(1200)
LVH201B10H-2R2□-N	2.2	20, 30	1	0.205	1400(1200)	1150(970)
LVH201B10H-3R3□-N	3.3	20, 30	1	0.380	1050(940)	900(800)
LVH201B10H-4R7□-N	4.7	20, 30	1	0.520	900(800)	800(680)
LVH201B10H-100□-N	10	20, 30	1	1.100	620(550)	450(380)

**Note:** When ordering, please specify tolerance code. Tolerance: M=±20% , T =±30%

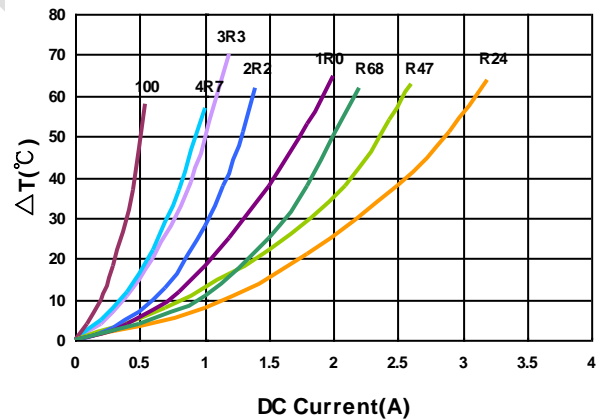
- Operating temperature range - 55°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 30% from its value without current
- Irms for a 40°C temperature rise from 25°C ambient with current
- Measure Equipment :
- L : Agilent HP4287A+Agilent HP16197A, 1MHz 200mV
- RDC : DIGITAL MILLINHM METER CHROMA 16502, or equivalent
- Isat & Irms : Agilent HP4284A

**Test Instruments :** HP4284A Material/Impedance Analyzer

Inductance vs. DC Current



Temperature Change vs. DC Current



## Electrical Characteristics

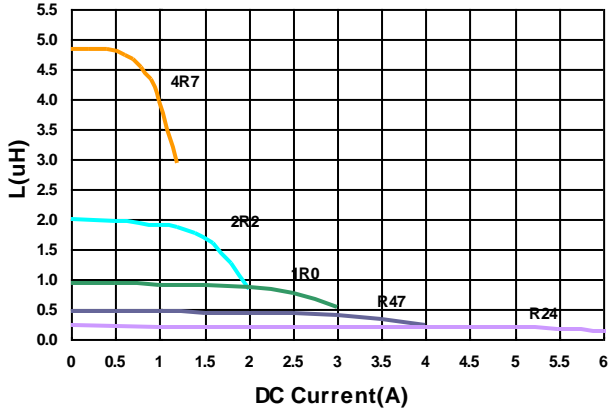
Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	RDC (Ω) ±30%	Isat (mA) Typ. (Max)	Irms (mA) Typ. (Max)
LVH252A10H-R24□-N	0.24	20, 30	1	0.030	4700(4200)	3600(3000)
LVH252A10H-R47□-N	0.47	20, 30	1	0.043	3300(3000)	2700(2300)
LVH252A10H-R68□-N	0.68	20, 30	1	0.062	2800(2500)	2300(1900)
LVH252A10H-1R0□-N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

**Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T =±30%**

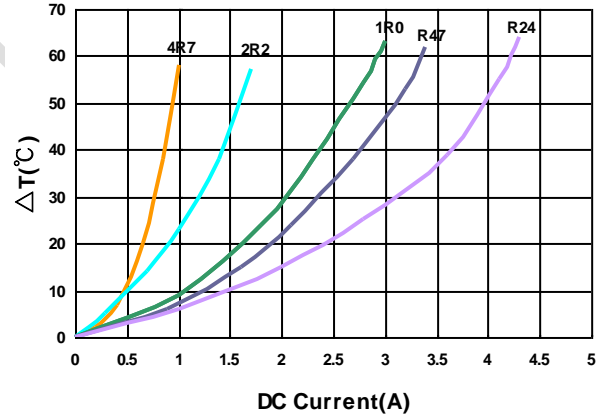
- Operating temperature range - 55°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 30% from its value without current
- Irms for a 40°C temperature rise from 25°C ambient with current
- Measure Equipment :
- L : Agilent HP4287A+Agilent HP16197A, 1MHz 200mV
- RDC : DIGITAL MILLINHM METER CHROMA 16502, or equivalent
- Isat & Irms : Agilent HP4284A

## Test Instruments : HP4284A Material/Impedance Analyzer

Inductance vs. DC Current



Temperature Change vs. DC Current



# Sealed Power Inductors - LVH Series

## Electrical Characteristics

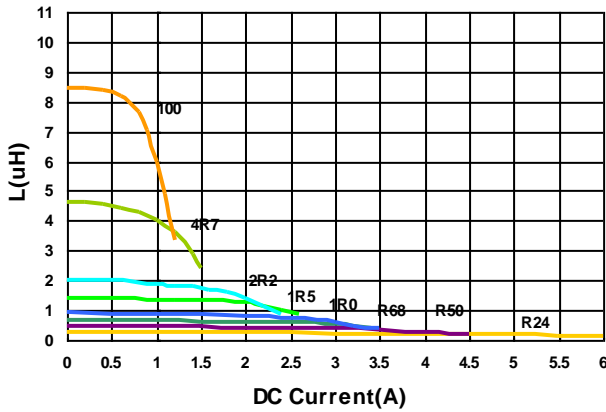
Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	RDC (Ω) ±30%	Isat (mA) Typ. (Max)	Irms (mA) Typ. (Max)	Marking
LVH252A12-R24□-N	0.24	20, 30	1	0.021	4700(4200)	3800(3200)	E
LVH252A12-R33□-N	0.33	20, 30	1	0.027	4200(3700)	3000(2500)	G
LVH252A12-R47□-N	0.47	20, 30	1	0.027	3600(3400)	3000(2500)	J
LVH252A12-R50□-N	0.50	20, 30	1	0.027	3600(3400)	3000(2500)	D
LVH252A12-R68□-N	0.68	20, 30	1	0.036	2900(2600)	2800(2300)	H
LVH252A12-1R0□-N	1.0	20, 30	1	0.037	2700(2450)	2600(2200)	A
LVH252A12-1R5□-N	1.5	20, 30	1	0.075	2200(1900)	1900(1600)	I
LVH252A12-2R2□-N	2.2	20, 30	1	0.080	1900(1800)	1800(1500)	B
LVH252A12-4R7□-N	4.7	20, 30	1	0.195	1200(1000)	1100(930)	C
LVH252A12-100□-N	10	20, 30	1	0.400	900(800)	800(680)	F
LVH252A12-470□-N	47	20, 30	1	1.700	390(350)	340i(300)	K

**Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T =±30%**

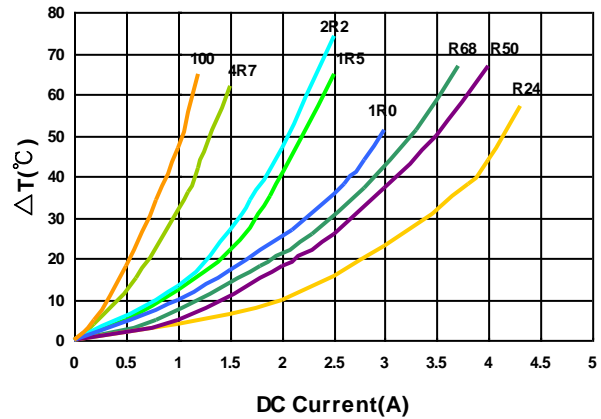
- Operating temperature range - 55°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 30% from its value without current
- Irms for a 40°C temperature rise from 25°C ambient with current
- Measure Equipment :
- L : Agilent HP4287A+Agilent HP16197A, 1MHz 200mV
- RDC : DIGITAL MILLINHM METER CHROMA 16502, or equivalent
- Isat & Irms : Agilent HP4284A

## Test Instruments : HP4284A Material/Impedance Analyzer

**Inductance vs. DC Current**



**Temperature Change vs. DC Current**



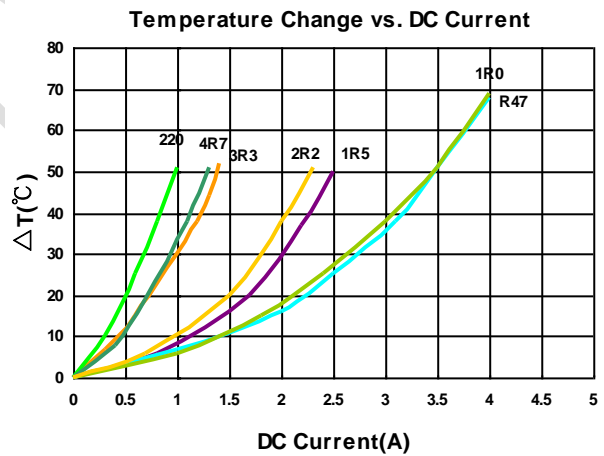
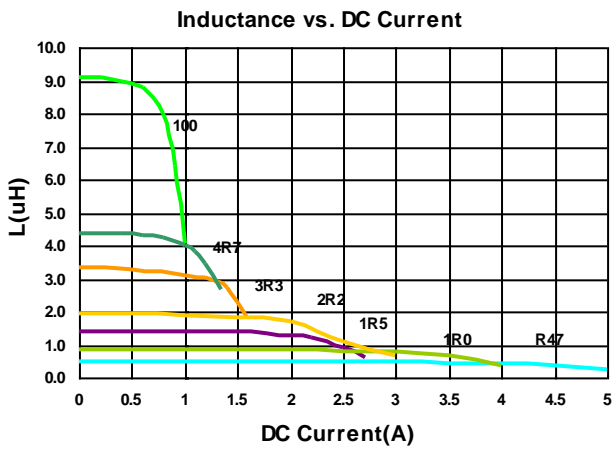
## Electrical Characteristics

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

**Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T =±30%**

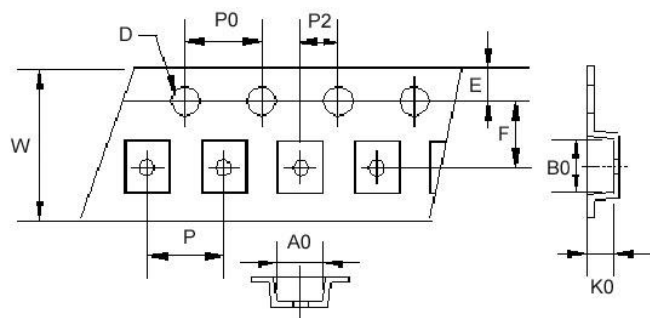
- Operating temperature range - 55°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 30% from its value without current
- Irms for a 40°C temperature rise from 25°C ambient with current
- Measure Equipment :
- L : Agilent HP4287A+Agilent HP16197A, 1MHz 200mV
- RDC : DIGITAL MILLINHM METER CHROMA 16502, or equivalent
- Isat & Irms : Agilent HP4284A

## Test Instruments : HP4284A Material/Impedance Analyzer

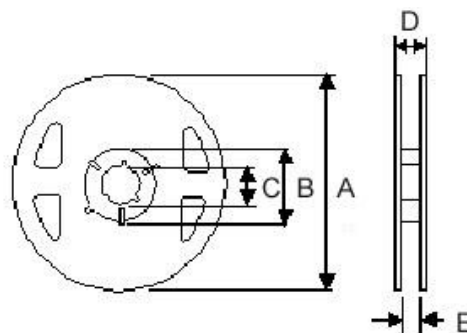


## Packaging Specifications

Tape Dimensions



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions										Reel Dimensions					Quantity PCS / Reel
	A0	B0	K0	D	E	F	W	P	P0	P2	A	B	C	D	E	
LVH201B10H	1.90	2.20	1.15	1.55	1.75	3.5	8.1	4	4	2	180	60	13	14.4	8.4	2000
LVH252A10H	2.40	2.70	1.15	1.55	1.75	3.5	8.1	4	4	2	180	60	13	14.4	8.4	2000
LVH252A12H	2.40	2.70	1.35	1.55	1.75	3.5	8.1	4	4	2	180	60	13	14.4	8.4	2000
LVH252A12	2.40	2.70	1.35	1.55	1.75	3.5	8.1	4	4	2	180	60	13	14.4	8.4	2000