

## LVF Series



LVF series, an automatic assembly power inductor, is shielded with magnetic resin and suitable for the portable DC-DC converter application.

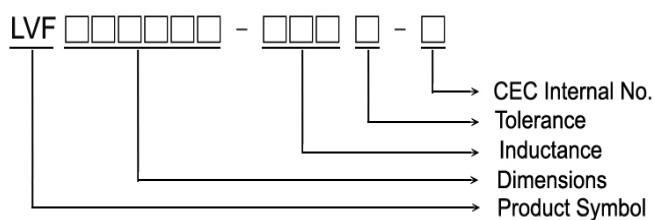
### Features

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

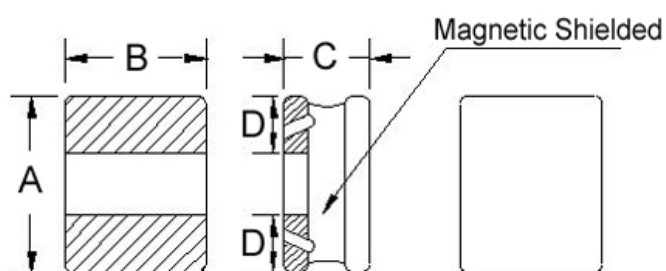
### Applications

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

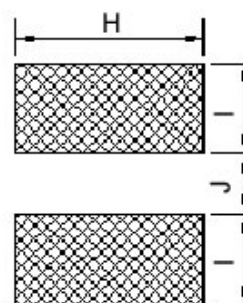
### Product Identification



### Shapes and Dimensions



### Recommended Pattern



Dimensions in mm

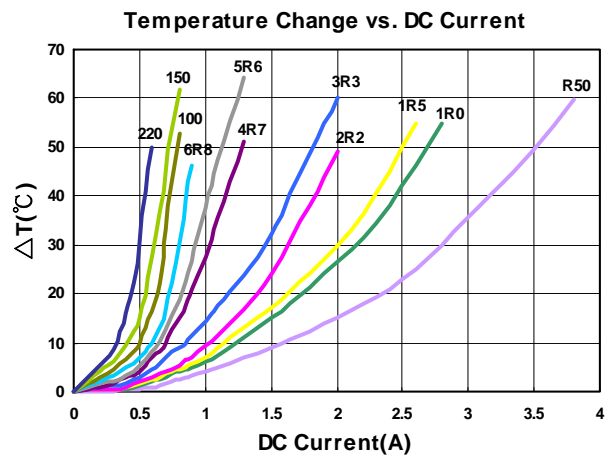
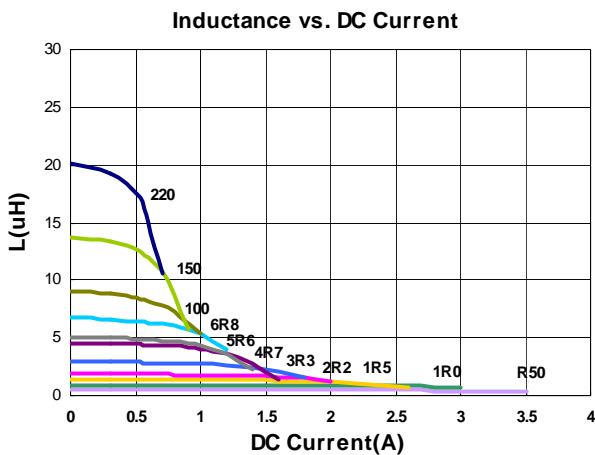
TYPE	A	B	C	D	H	I	J
LVF252A12	2.5±0.25	2.0±0.25	1.2±0.05	0.8	2.2	0.85	0.8
LVF303010	3.0±0.20	3.0±0.20	1.02 Max	1.0	3.2	1.1	1.0
LVF303012	3.0±0.20	3.0±0.20	1.20 Max	1.0	3.2	1.1	1.0

## Electrical Characteristics

Part Number	Inductance ( $\mu\text{H}$ )	Test Frequency (MHz)	Tolerance ( $\pm\%$ )	RDC ( $\Omega$ ) $\pm 30\%$	Isat (A) Typ. (Max)	Irms (A) Typ. (Max)
LVF252A12-R50□-N	0.50	1	20, 30	0.028	3.50(2.80)	3.00(2.4)
LVF252A12-1R0□-N	1.0	1	20, 30	0.050	2.50(2.00)	2.40(1.92)
LVF252A12-1R2□-N	1.2	1	20, 30	0.053	2.10(1.68)	2.35(1.88)
LVF252A12-1R5□-N	1.5	1	20, 30	0.068	1.95(1.56)	2.30(1.84)
LVF252A12-2R2□-N	2.2	1	20, 30	0.080	1.80(1.44)	1.80(1.44)
LVF252A12-3R3□-N	3.3	1	20, 30	0.130	1.45(1.16)	1.50(1.20)
LVF252A12-4R7□-N	4.7	1	20, 30	0.190	1.10(0.88)	1.10(0.88)
LVF252A12-5R6□-N	5.6	1	20, 30	0.210	1.05(0.84)	1.00(0.80)
LVF252A12-6R8□-N	6.8	1	20, 30	0.300	0.95(0.76)	0.80(0.64)
LVF252A12-100□-N	10	1	20, 30	0.385	0.88(0.704)	0.70(0.56)
LVF252A12-150□-N	15	1	20, 30	0.570	0.68(0.544)	0.62(0.496)
LVF252A12-220□-N	22	1	20, 30	0.810	0.55(0.440)	0.53(0.424)

- When ordering, please specify tolerance and packaging codes.
- Tolerance : T =  $\pm 30\%$  , M =  $\pm 20\%$
- 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°C rise above 25°C ambient.
- Operating temperature range from -40°C to 125°C . (Including self - temperature rise)

## Test Instruments : HP4284A Material/Impedance Analyzer

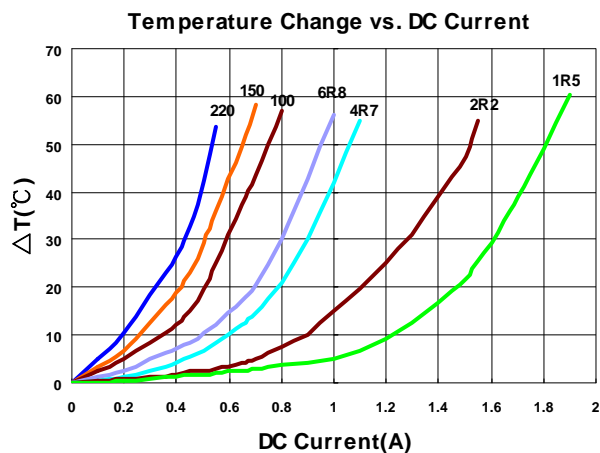
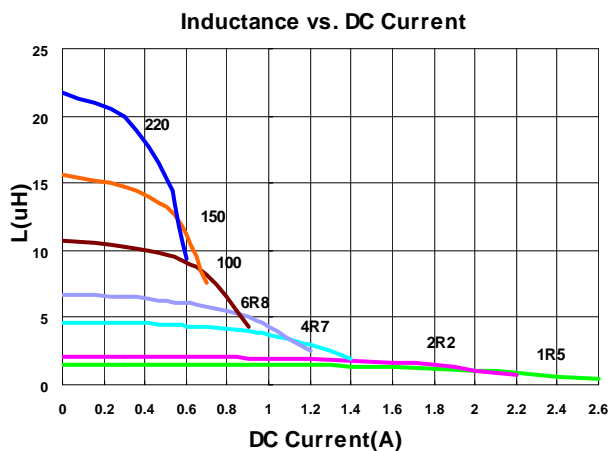


## Electrical Characteristics

Part Number	Inductance (uH)	Test Frequency (MHz)	Tolerance (±%)	RDC (Ω) ±30%	Isat (A) Typ. (Max)	Irms (A) Typ. (Max)
LVF303010-1R5□-N	1.5	1	20, 30	0.085	1.80(1.44)	1.70(1.36)
LVF303010-2R2□-N	2.2	1	20, 30	0.100	1.50(1.20)	1.4(1.12)
LVF303010-4R7□-N	4.7	1	20, 30	0.205	1.00(0.80)	0.95(0.76)
LVF303010-6R8□-N	6.8	1	20, 30	0.310	0.87(0.696)	0.85(0.68)
LVF303010-100□-N	10	1	20, 30	0.430	0.64(0.512)	0.63(0.504)
LVF303010-150□-N	15	1	20, 30	0.625	0.56(0.448)	0.55(0.44)
LVF303010-220□-N	22	1	20, 30	0.870	0.47(0.376)	0.46(0.368)

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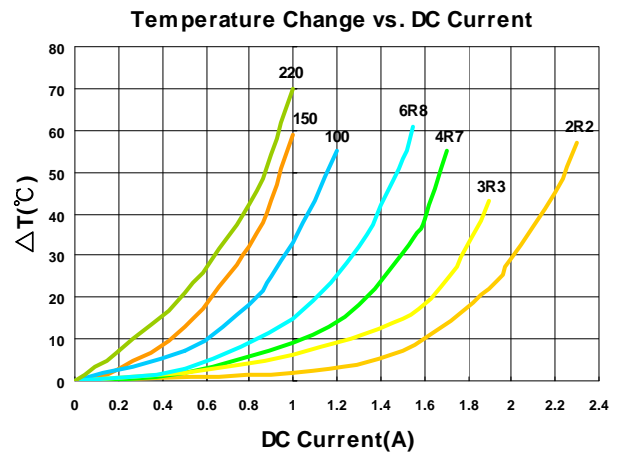
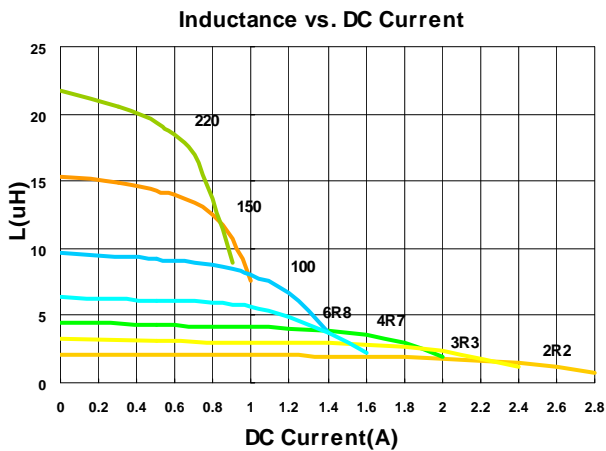


## Electrical Characteristics

Part Number	Inductance ( $\mu\text{H}$ )	Test Frequency (MHz)	Tolerance ( $\pm\%$ )	RDC ( $\Omega$ ) $\pm 30\%$	Isat (A)Typ	Irms (A)Typ
LVF303012-2R2□-N	2.2	1	20, 30	0.092	2.10(1.680)	2.00(1.600)
LVF303012-3R3□-N	3.3	1	20, 30	0.13	1.84(1.472)	1.80(1.440)
LVF303012-4R7□-N	4.7	1	20, 30	0.18	1.56(1.248)	1.52(1.216)
LVF303012-6R8□-N	6.8	1	20, 30	0.25	1.32(1.056)	1.30(1.040)
LVF303012-100□-N	10	1	20, 30	0.42	1.06(0.848)	1.00(0.880)
LVF303012-150□-N	15	1	20, 30	0.56	0.82(0.656)	0.80(0.640)
LVF303012-220□-N	22	1	20, 30	0.86	0.64(0.512)	0.62(0.496)

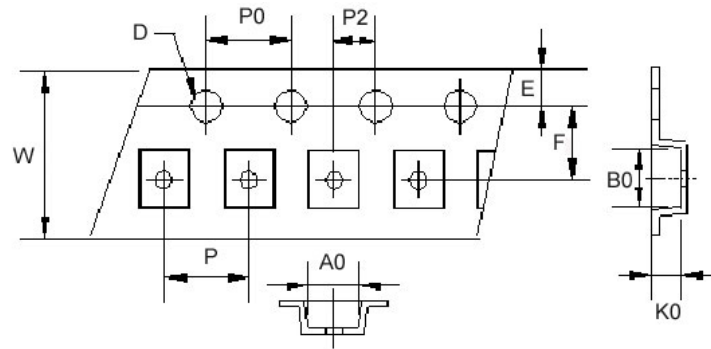
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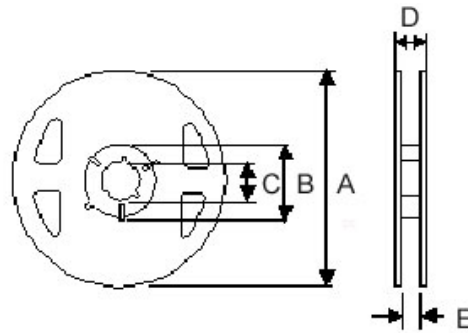


Packaging Specifications

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		
LVF252A12	2.40	2.70	1.30	1.55	1.75	3.5	8	4	4	2	180	60	13	14.4	8.4	2000	
LVF303010	3.20	3.20	1.40	1.55	1.75	3.5	8	4	4	2	180	60	13	14.4	8.4	2000	
LVF303012	3.20	3.20	1.40	1.55	1.75	3.5	8	4	4	2	180	60	13	14.4	8.4	2000	