

### NANOCRYSTALLINE COMMON MODE COILS

# L\_**-V**<sub>Series</sub>



#### **MAJOR USES**

Common mode noise filter for AC/DC

#### *<b>♦FEATURES*

•Significantly improved inductance performance when compared to the FL Series •Achieved high impedance over a broad range of frequencies when compared to the FL Series



### **CORE STANDARD SPECIFICATIONS**

Coil Part No. <sup>⁺1</sup>	Core Part No.	Rated voltage [V]	Rated Current [A]	Inductance		DCB	Winding	Outside Dimensions			Frequency	Temperature
				10kHz [mH]	100kHz [mH]	mΩ (max)	mm $\phi \times$ lines	D1 [mm]	D2 [mm]	W [mm]	Characteristics Graph	<sub>rise</sub> Graph
LDFL004272VS-0E	F110705	250	3.5	6.0	2.7	38	0.55×1P	15.0	16.0	12.0	1,2	A
LDFL006102VS-00E			5.5	2.3	1.0	16	0.7×1P					
LDFL006832VD-0E	- F221407	250	5.5	18.3	8.3	26	0.9×1P	27.0	31.0	17.5	3,4	В
LDFL009412VD-0E			9	9.1	4.1	16	1.1×1P					
LDFL012282VD-0E			12	6.2	2.8	9.5	1.3×1P					
LDFL014172VD-□0E			14	3.8	1.7	7	1.4×1P					
LDFL007652V6-□0E	F221310	250	7	16.3	6.5	22	1.0×1P	29.0	31.0	21.0	5,6	с
LDFL010302V6-□0E			10	6.7	3.0	11	1.2×1P					
LDFL012202V6-□0E			12	4.5	2.0	7.5	1.3×1P					
LDFL008123VV-□0E		250	8	25.3	11.5	26	1.1×1P	30.5 34	34.0	23.5	7,8	D
LDFL011742VV-□0E	F251513		11	16.2	7.4	15	1.3×1P					
LDFL013412VV-□0E			13	9.1	4.1	10	1.4×1P					
LDFL016362V8-□0E	F262115	500	16	7.8	3.6	7.5	1.8×1P	34.0	37.0	27.5	9,10	E
LDFL023162V8-□0E			23	3.4	1.6	3.7	2.1×1P					
LDFL028102V8-0E			28	2.2	1.0	2.5	1.6×2P					
LDFL015372VBU 0E	F281815	700	15	8.1	3.7	6.7	1.7×1P	36.0	39.5	29.5	11,12	F
LDFL021252VBU 0E			21	5.4	2.5	4.5	1.9×1P					
LDFL026152VBU 0E			26	3.3	1.5	2.9	1.5×2P					
LDFL016732V22□0E	F312115	500	16	16.0	7.3	7.9	1.9×1P	38.0	43.0	28.5	13,14	G
LDFL020412V22□0E			20	9.0	4.1	4.9	2.1×1P					
LDFL025232V22 0E			25	5.0	2.3	3.1	1.6×2P					
LDFL032142V22□0E			32	3.0	1.4	1.9	1.8×2P					
LDFL020592VJU 0E	F372315	700	20	12.9	5.9	5.7	1.5×2P	48.0	50.0	32.5	15,16	н
LDFL027282VJU 0E			27	6.2	2.8	3.1	1.7×2P					
LDFL039172VJU 0E			39	3.7	1.7	1.8	2.0×2P					
LDFL030392V28 0E	F443420	600	30	8.5	3.9	3.6	2.0×2P	53.0 59.	50.5	39.0	17,18	J
LDFL036262V28 0E			36	5.6	2.6	2.5	2.2×2P		59.5			

\*1 For Coil Part No., vertical type=V, horizontal type=H are used



0.1

0.01

1k

10k

100k

1M

frequency [Hz]

10M

100M



### Frequency Characteristics Ambient temperature : 25°C

10M

100M

0.1

0.01

1k

10k

100k

1M

frequency [Hz]





### Frequency Characteristics Ambient temperature : 25°C





### Frequency Characteristics Ambient temperature : 25°C



## FL-V<sub>Series</sub>

Temperature rise Ambient temperature: 25°C (calm) Saturation temperature for the DC current flow \* Installation conditions or the influence of heat emitted by surrounding components are not considered in this data.





NIPPON CHEMI-CON

Rise temperature: Ambient temperature=25°C Saturated temperature due to DC current application. \*This data don't consider set situation, influence of around parts.



### Notes

- The lead wire have made of copper, Please be careful not to repeat the strong force and bending.
- Please do not hit the coil against a hard sharp object. Scratch on the coating, possibly impairing performance.
- Heat-resistant temperature 130°C means the surface temperature including coil self-heating.
- In high-temperature,-humidity environment, There is a possibility to occur hydrolyze and insulation deterioration.
- Common mode coils, by the unbalanced current, it may cause a magnetic saturation.
- We do not acquire safety standards with coil only.



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### **♦**CORE STANDARD SPECIFICATIONS



Maximum outer diameter : D1(Vertical), D2(Horizontal) Maximum width : W Total lead length\* : L=15±5mm Soldering boundary\* : a=1.5mmMAX

\*The bottom of the core or coil (▽) is defined as base surface.

	Detect	Induc	tance	D.C.R. mΩ (max)		Outside Dimensions			
Coil Part No.	Rated Current A	10kHz (Typical)	100kHz (Rating)		Winding $mm \phi \times lines$	D1 mm	D2 mm	W	
		mH	mH						
LDFL010143V72H0E	10	30.7	14.0	18	1.5×1P	56.0	56.0	32.0	
LDFL020502V72H0E	20	11.1	5.0	6	2.0×1P	56.0	56.0	32.0	
LDFL015163VGQH0E	15	34.5	15.7	15	2.0×1P	65.0	65.0	35.0	
LDFL020792VGQH0E	20	17.3	7.9	6	2.3×1P	65.0	65.0	35.0	
LDFL025542VGQH0E	25	11.7	5.4	5	1.8×2P	65.0	65.0	35.0	
LDFL030332VGQH0E	30	7.2	3.3	4	2.0×2P	65.0	65.0	35.0	

≥



