Press Release

Nippon Chemi-Con Corporation
April 3, 2019

Common Mode Choke Coils FL-V Series
Development of high-performance, small-size products by achieving high magnetic permeability

Nippon Chemi-Con has developed common mode choke coils FL-V Series with permeability at 100kHz increased to 200% compared to conventional products. The Series will contribute to downsizing of switching power supplies and inverter power supplies.

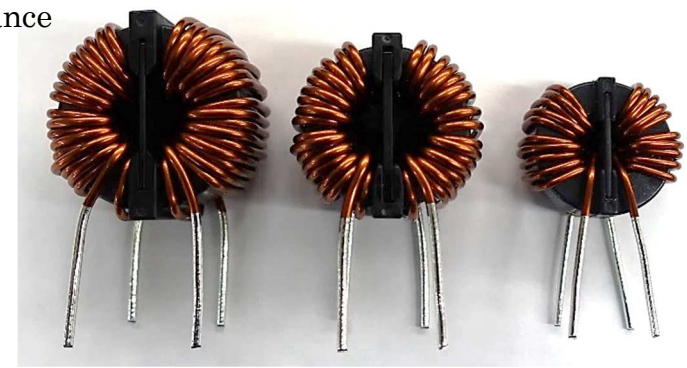
We have commercialized the FL Series as common mode choke coils using nanocrystalline for magnetic material and sold them as noise filters for power supply input/output and DC line noise filters.
The new FL-V Series achieves improved performance and smaller size and lighter weight through improvements in magnetic materials.

Compared to the conventional FL Series, the permeability at 100 kHz is improved to 200% while maintaining the permeability at 10 kHz and without lowering the resonance frequency.
In addition, the product size with equivalent performance at 100 kHz can be reduced by 35 to 40%.

The switching frequency of power supplies and the control frequency of inverter power supplies tend to increase as the equipment becomes smaller and achieves more advanced features. In addition, there has been an increase in the number of devices that generate noise accompanying the advance of electronic control of automobiles and the spread of EVs and PHEVs.
We propose the FL-V Series as an effective product for noise reduction of such equipment.

◆Samples and Mass Production
The FL-V Series will be available as samples from April 2019, and mass production is scheduled to start in June 2019.
They will be produced at Chemi-Con Iwate Corp. (a wholly owned subsidiary of Nippon Chemi-Con)

◆Product Appearance

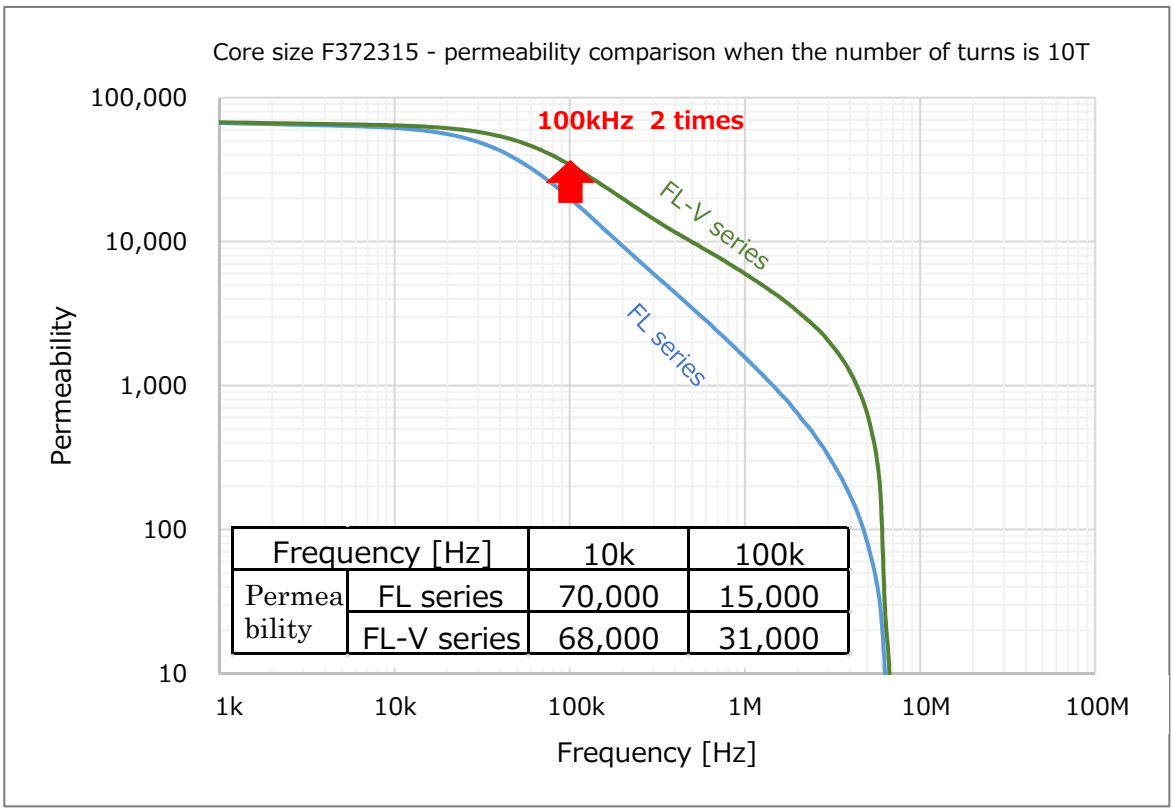


◆Product Profile

- Operating temperature range: -40 to +130°C
- Rated voltage range: AC/DC 250 to 700V
- Rated current range: 3.5 to 39.0A
- Thermal endurance class: B (130°C)

◆Product Features

[Comparison with existing products - permeability frequency characteristics]



Frequency [Hz]		10k	100k
Permeability	FL series	70,000	15,000
	FL-V series	68,000	31,000

[Comparison with existing products - impedance frequency characteristics]