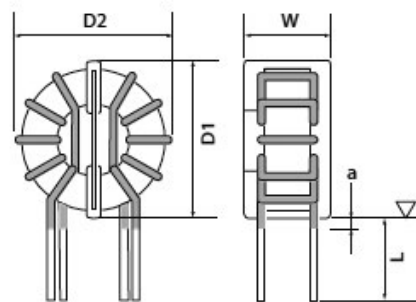




## ◆ MAJOR USES

- AC/DC Common mode filter

## ◆ FEATURES

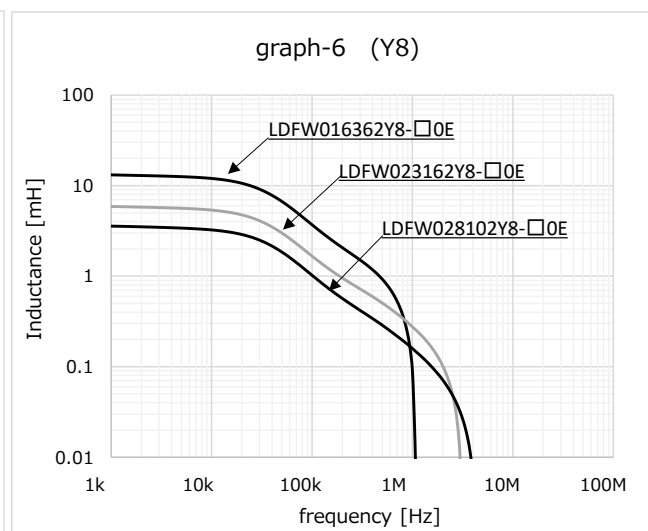
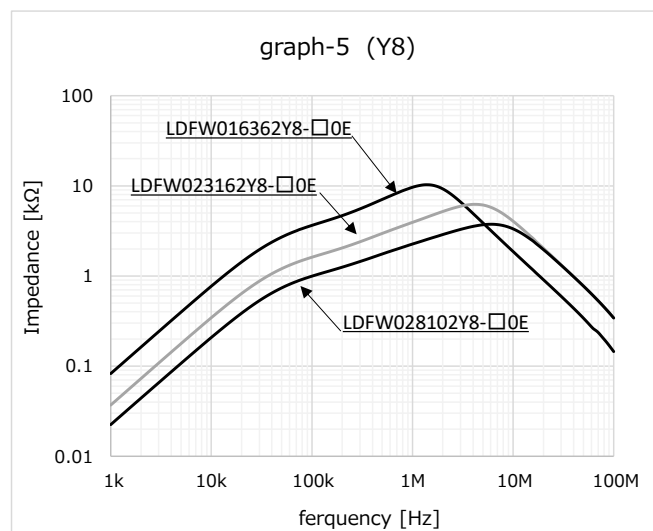
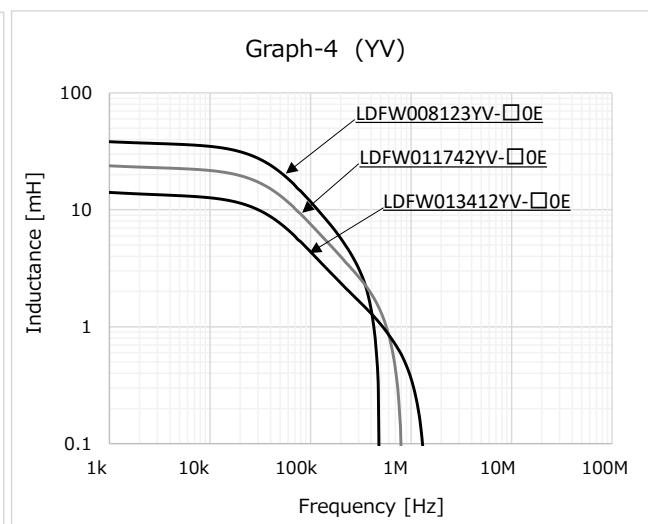
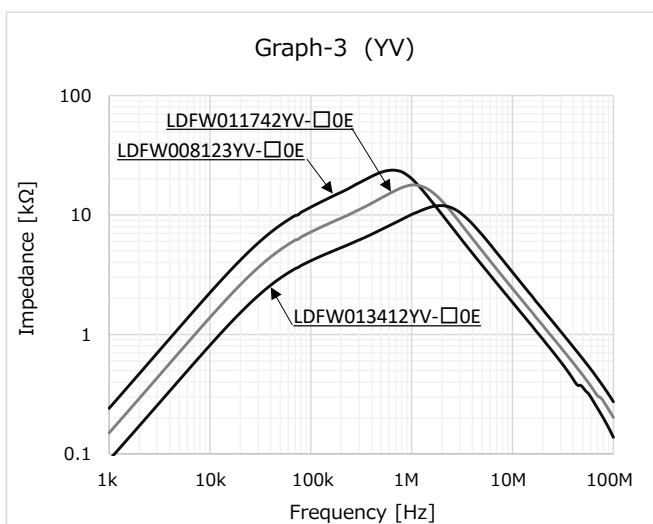
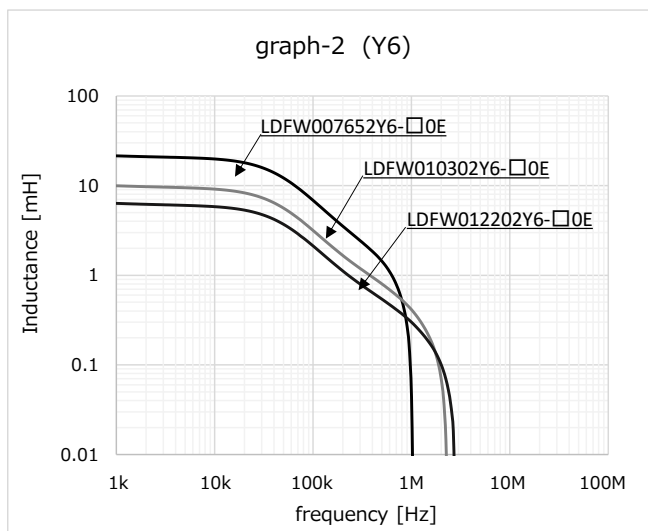
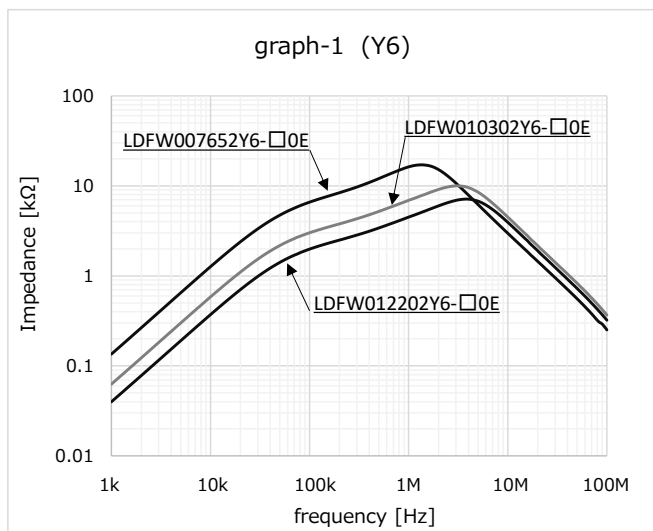
- Greatly improved inductance (10kHz, 100kHz).
- Improved impedance in the 150 kHz to 1 MHz frequency band when compared to the FL-V series coils.
- Deal with it by rated voltage 700V.
- Conforming to insulating type: B and incombustibility UL94V-0.

## ◆ CORE STANDARD SPECIFICATIONS

| Coil Part No. *1 | Core No. | Rated voltage [V] | Rated Current [A] | Inductance |             | D.C.R. [mΩ] | Winding mm φ × lines | Outside Dimensions |         |        | Frequency Characteristics Graph | Temperature rise Graph |
|------------------|----------|-------------------|-------------------|------------|-------------|-------------|----------------------|--------------------|---------|--------|---------------------------------|------------------------|
|                  |          |                   |                   | 10kHz [mH] | 100kHz [mH] |             |                      | D1 [mm]            | D2 [mm] | W [mm] |                                 |                        |
| LDFW007652Y6-□0E | F221310  | 250               | 7                 | 21.0       | 6.5         | 22          | 1.0×1P               | 29.0               | 31.0    | 21.0   | 1,2                             | A                      |
| LDFW010302Y6-□0E |          |                   | 10                | 9.7        | 3.0         | 11          | 1.2×1P               |                    |         |        |                                 |                        |
| LDFW012202Y6-□0E |          |                   | 12                | 6.5        | 2.0         | 7.5         | 1.3×1P               |                    |         |        |                                 |                        |
| LDFW008123YV-□0E | F251513  | 250               | 8                 | 37.1       | 11.5        | 26          | 1.1×1P               | 30.5               | 34.0    | 23.5   | 3,4                             | B                      |
| LDFW011742YV-□0E |          |                   | 11                | 23.9       | 7.4         | 15          | 1.3×1P               |                    |         |        |                                 |                        |
| LDFW013412YV-□0E |          |                   | 13                | 13.2       | 4.1         | 10          | 1.4×1P               |                    |         |        |                                 |                        |
| LDFW016362Y8-□0E | F262115  | 500               | 16                | 11.6       | 3.6         | 7.5         | 1.8×1P               | 34.0               | 37.0    | 27.5   | 5,6                             | C                      |
| LDFW023162Y8-□0E |          |                   | 23                | 5.2        | 1.6         | 3.7         | 2.1×1P               |                    |         |        |                                 |                        |
| LDFW028102Y8-□0E |          |                   | 28                | 3.2        | 1.0         | 2.5         | 1.6×2P               |                    |         |        |                                 |                        |
| LDFW015372YBU□0E | F281815  | 700               | 15                | 11.9       | 3.7         | 6.7         | 1.7×1P               | 36.0               | 39.5    | 29.5   | 7,8                             | D                      |
| LDFW021252YBU□0E |          |                   | 21                | 8.1        | 2.5         | 4.5         | 1.9×1P               |                    |         |        |                                 |                        |
| LDFW026152YBU□0E |          |                   | 26                | 4.8        | 1.5         | 2.9         | 1.5×2P               |                    |         |        |                                 |                        |
| LDFW016732Y22□0E | F312115  | 500               | 16                | 23.5       | 7.3         | 7.9         | 1.9×1P               | 38.0               | 43.0    | 28.5   | 9,10                            | E                      |
| LDFW020412Y22□0E |          |                   | 20                | 13.2       | 4.1         | 4.9         | 2.1×1P               |                    |         |        |                                 |                        |
| LDFW025232Y22□0E |          |                   | 25                | 7.4        | 2.3         | 3.1         | 1.6×2P               |                    |         |        |                                 |                        |
| LDFW032142Y22□0E |          |                   | 32                | 4.5        | 1.4         | 1.9         | 1.8×2P               |                    |         |        |                                 |                        |
| LDFW020592YJU□0E | F372315  | 700               | 20                | 19.0       | 5.9         | 5.7         | 1.5×2P               | 48.0               | 50.0    | 32.5   | 11,12                           | F                      |
| LDFW027282YJU□0E |          |                   | 27                | 9.0        | 2.8         | 3.1         | 1.7×2P               |                    |         |        |                                 |                        |
| LDFW039172YJU□0E |          |                   | 39                | 5.5        | 1.7         | 1.8         | 2.0×2P               |                    |         |        |                                 |                        |
| LDFW030392Y28□0E | F443420  | 600               | 30                | 12.6       | 3.9         | 3.6         | 2.0×2P               | 53.0               | 59.5    | 39.0   | 13,14                           | G                      |
| LDFW036262Y28□0E |          |                   | 36                | 8.4        | 2.6         | 2.5         | 2.2×2P               |                    |         |        |                                 |                        |

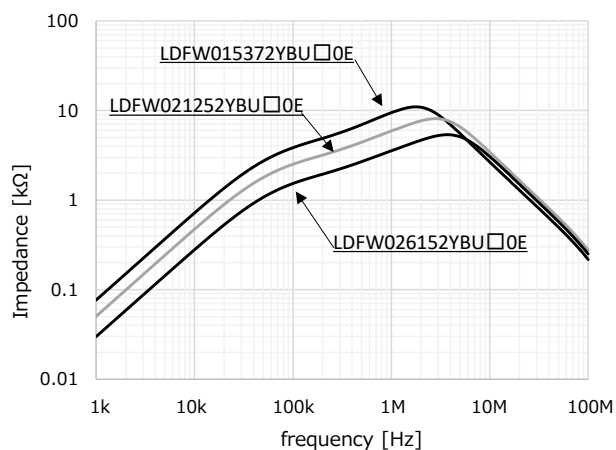
\*1 About Coils Number, □ mark means vertical=V, horizontal=H.

Frequency characteristics Ambient temperature:25℃

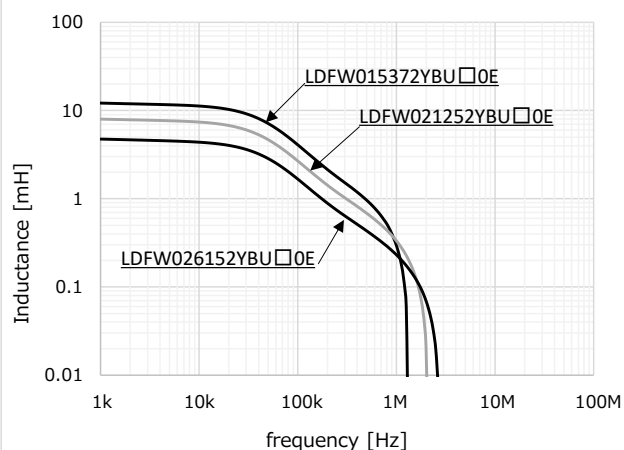


Frequency characteristics Ambient temperature:25 $\pm$ 5

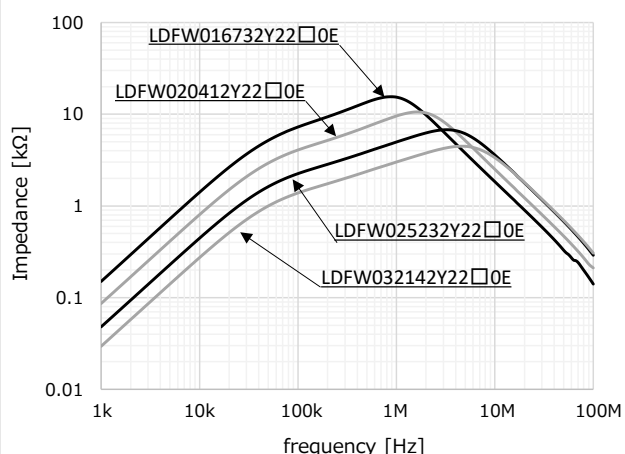
graph-7 (YBU)



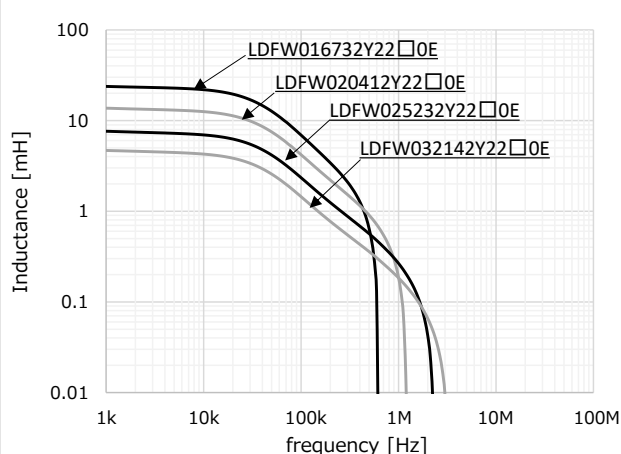
graph-8 (YBU)



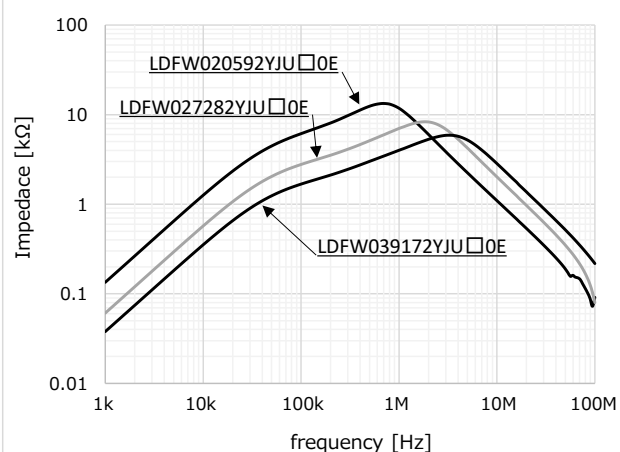
graph-9 (Y22)



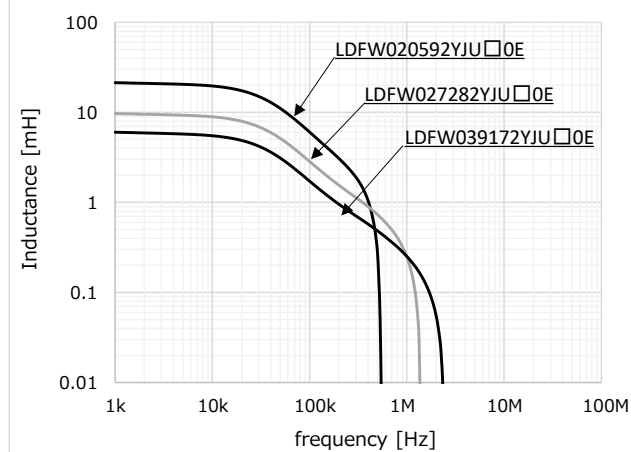
graph-10 (Y22)



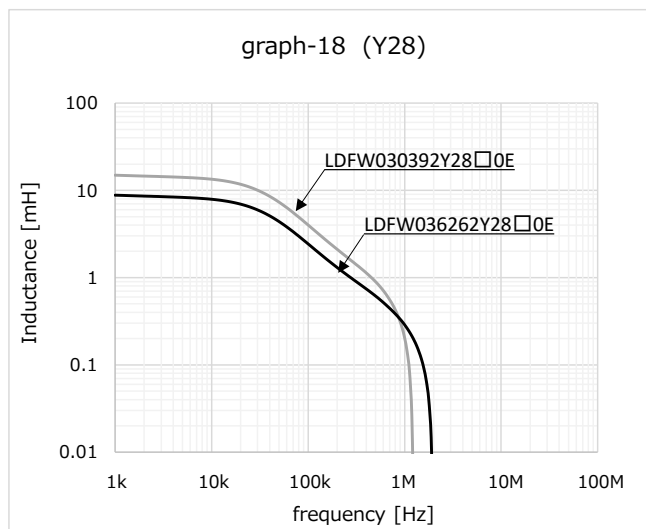
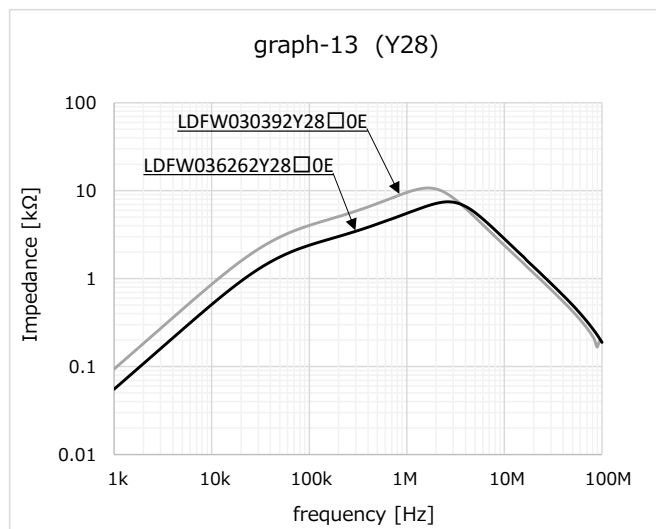
graph-11 (YJU)



graph-12 (YJU)

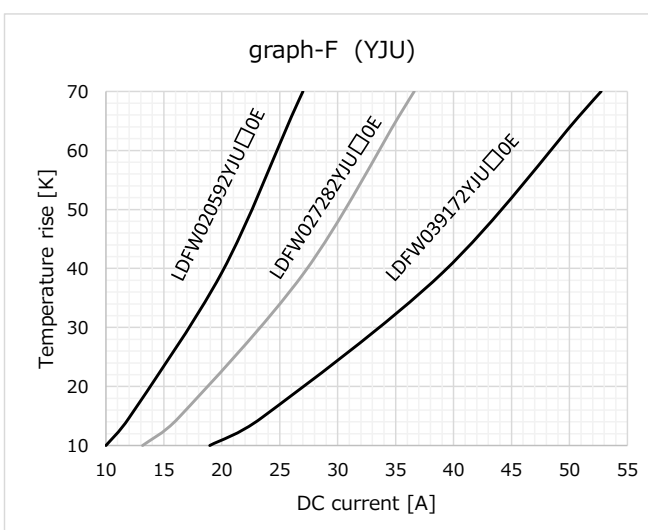
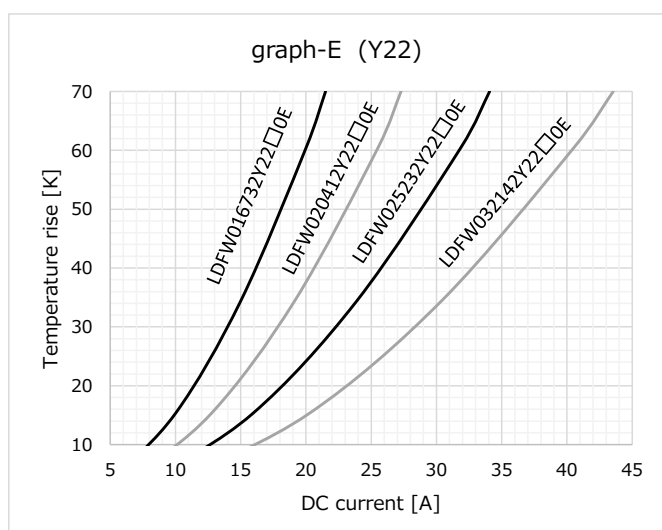
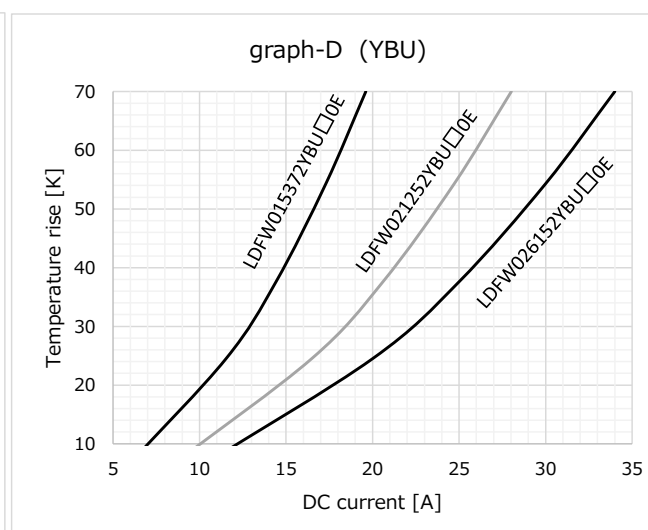
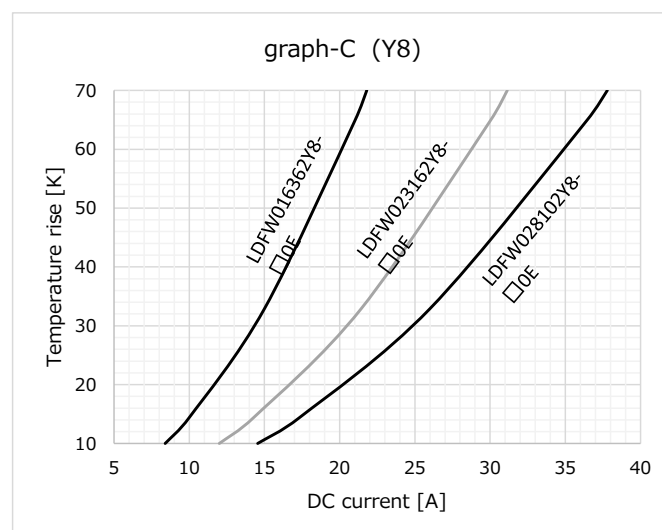
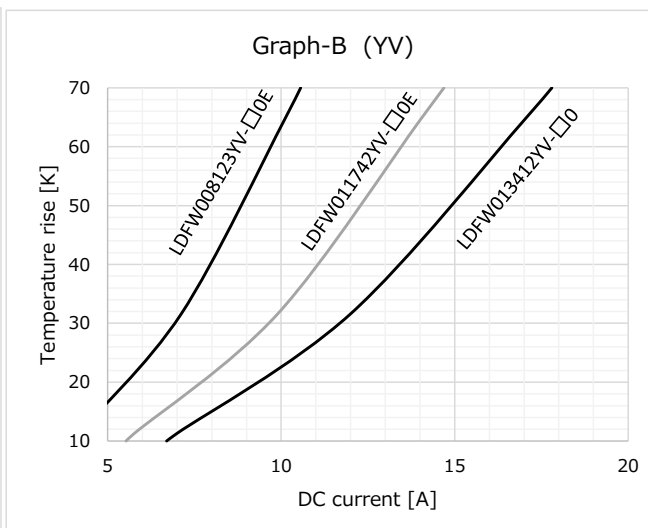
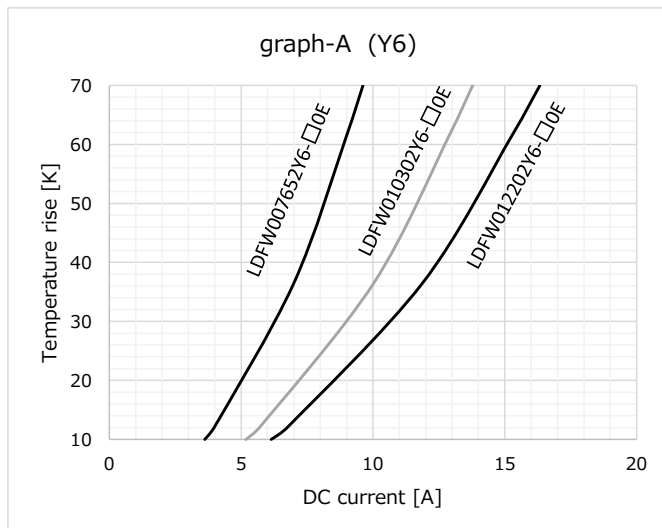


Frequency characteristics Ambient temperature:25℃

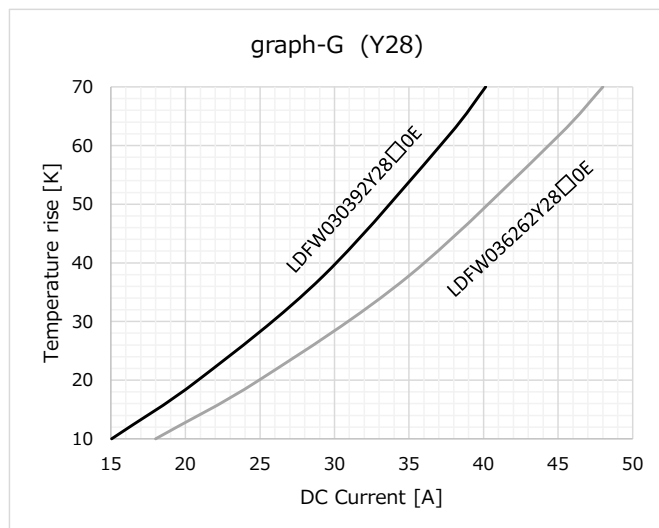


Rise temperature: Ambient temperature=25℃ Saturated temperature due to DC current application.

□ This data don't consider set situation, influence of around parts.



Rise temperature: Ambient temperature=25℃ 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℃ 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.

For three-phase circuit

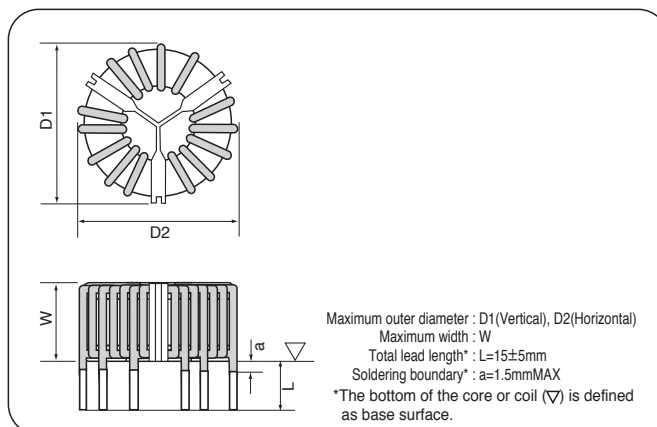
## ◆MAJOR USES

- Noise filter for inverter and large-capacity power supply

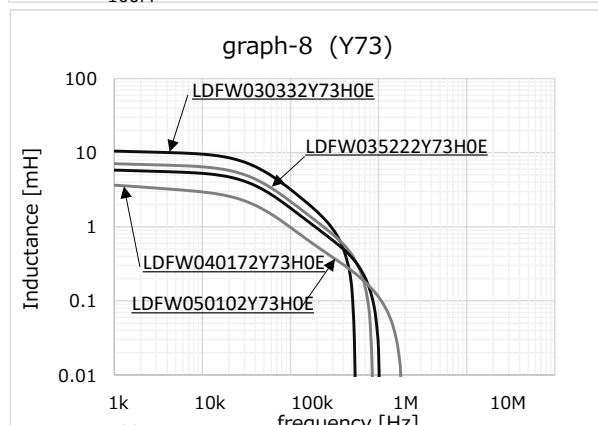
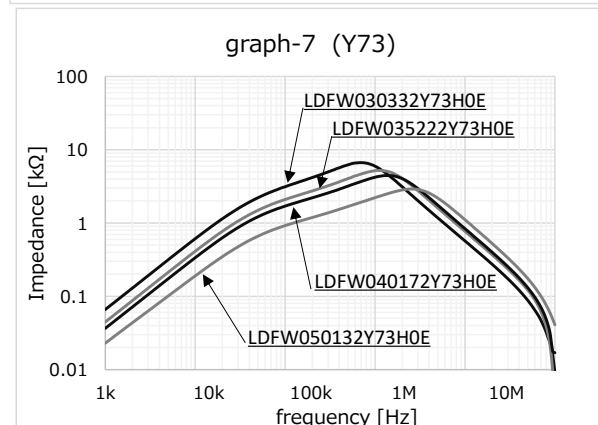
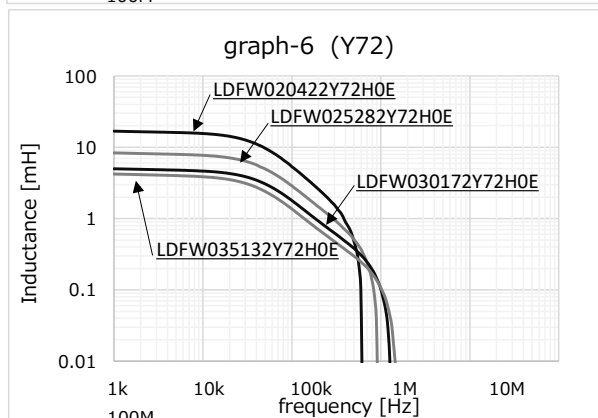
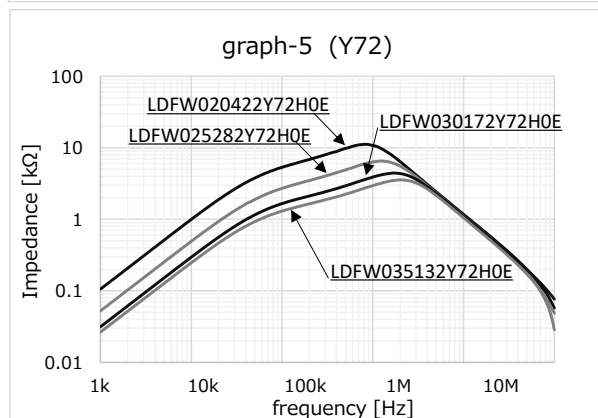
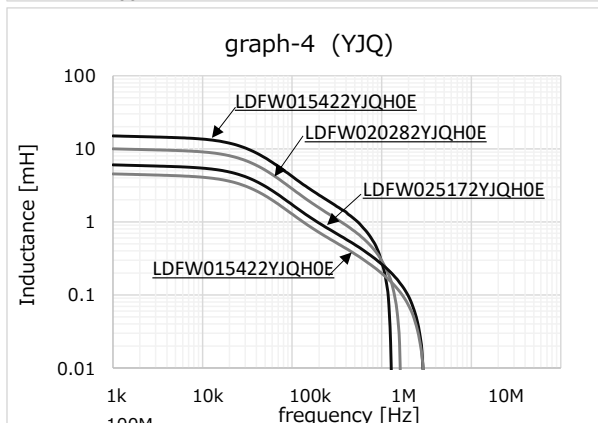
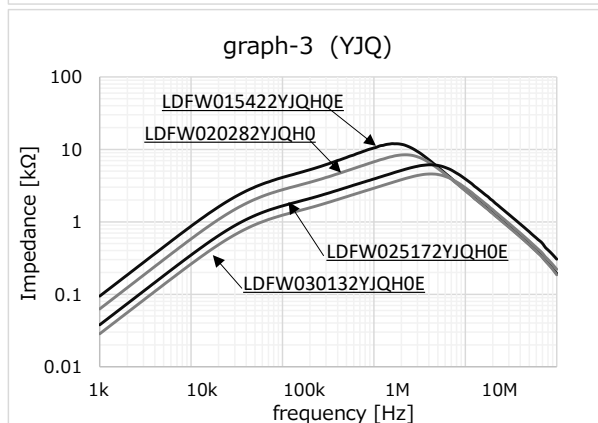
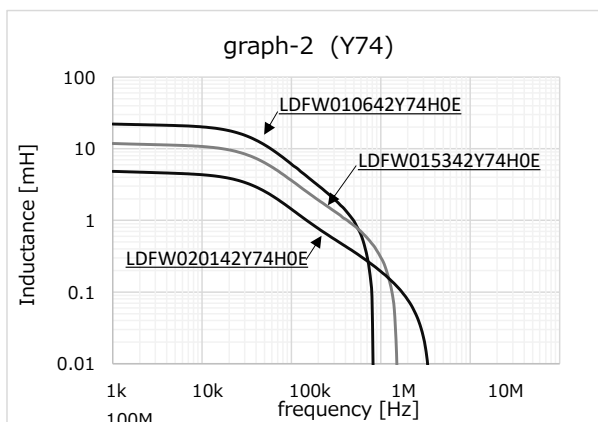
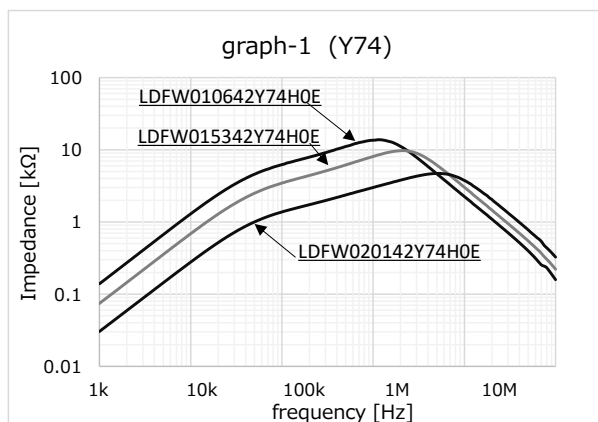
## ◆FEATURES

- Greatly improved inductance (10kHz,100kHz).
- Improved impedance in the 150 kHz to 1 MHz frequency band when compared to the FL-V series coils.
- Conforming to insulating type:B and incombustibility UL94V-0.
- Deal with it by rated voltage 500V.

## ◆CORE STANDARD SPECIFICATIONS



| Coil Part No.    | Core No. | Rated voltage [V] | Rated Current [A] | Inductance |             | D.C.R. [mΩ] | Winding mm φ × lines | Outside Dimensions |         |        | Frequency Graph |
|------------------|----------|-------------------|-------------------|------------|-------------|-------------|----------------------|--------------------|---------|--------|-----------------|
|                  |          |                   |                   | 10kHz [mH] | 100kHz [mH] |             |                      | D1 [mm]            | D2 [mm] | W [mm] |                 |
| LDFW010642Y74H0E | F312115  | 500               | 10                | 20.7       | 6.4         | 13.0        | 1.4×1P               | 42.0               | 42.0    | 27.5   | 1,2             |
| LDFW015342Y74H0E | F312115  | 500               | 15                | 11.1       | 3.4         | 6.6         | 1.7×1P               | 42.0               | 42.0    | 27.5   |                 |
| LDFW020142Y74H0E | F312115  | 500               | 20                | 4.5        | 1.4         | 3.1         | 2.0×1P               | 42.0               | 42.0    | 27.5   |                 |
| LDFW015422YJQH0E | F372315  | 500               | 15                | 13.5       | 4.2         | 6.4         | 1.8×1P               | 48.5               | 48.5    | 27.5   | 3,4             |
| LDFW020282YJQH0E | F372315  | 500               | 20                | 9.0        | 2.8         | 4.5         | 2.0×1P               | 48.5               | 48.5    | 27.5   |                 |
| LDFW025172YJQH0E | F372315  | 500               | 25                | 5.5        | 1.7         | 2.6         | 2.3×1P               | 48.5               | 48.5    | 27.5   |                 |
| LDFW030132YJQH0E | F372315  | 500               | 30                | 4.0        | 1.3         | 2.0         | 2.3×1P               | 48.5               | 48.5    | 27.5   | 5,6             |
| LDFW020422Y72H0E | F422615  | 500               | 20                | 16.2       | 5.0         | 5.6         | 2.1×1P               | 56.0               | 56.0    | 32.0   |                 |
| LDFW025282Y72H0E | F422615  | 500               | 25                | 9.1        | 2.8         | 3.6         | 2.3×1P               | 56.0               | 56.0    | 32.0   |                 |
| LDFW030172Y72H0E | F422615  | 500               | 30                | 5.5        | 1.7         | 2.4         | 1.8×2P               | 56.0               | 56.0    | 32.0   | 7,8             |
| LDFW035132Y72H0E | F422615  | 500               | 35                | 4.0        | 1.3         | 1.7         | 2.0×2P               | 56.0               | 56.0    | 32.0   |                 |
| LDFW030332Y73H0E | F503415  | 500               | 30                | 10.6       | 3.3         | 4.0         | 2.0×2P               | 65.0               | 65.0    | 35.0   |                 |
| LDFW035222Y73H0E | F503415  | 500               | 35                | 7.1        | 2.2         | 2.3         | 2.1×2P               | 65.0               | 65.0    | 35.0   |                 |
| LDFW040172Y73H0E | F503415  | 500               | 40                | 5.6        | 1.7         | 1.9         | 2.2×2P               | 65.0               | 65.0    | 35.0   |                 |
| LDFW050102Y73H0E | F503415  | 500               | 50                | 3.2        | 1.0         | 1.2         | 2.4×2P               | 65.0               | 65.0    | 35.0   |                 |



## ◆MAJOR USES

- Signal line noise filter
- Noise filter for DC power lines
- Noise filter for AC power lines
- Zero-phase reactor

## ◆FEATURES

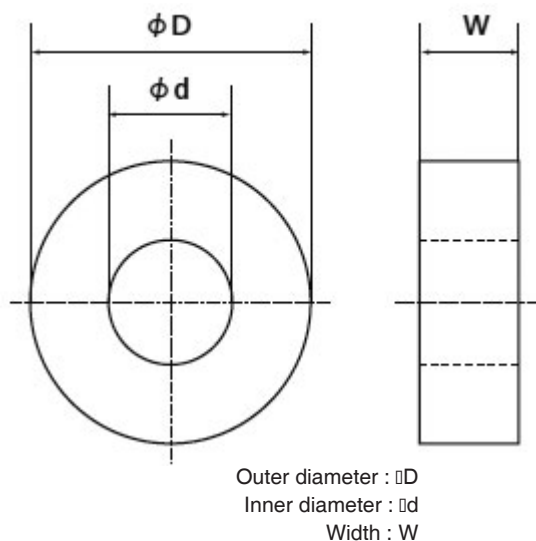
- Achieved high impedance over a broad range of frequencies when compared to the FL Series.
- Improved impedance in the 150 kHz to 1 MHz frequency band when compared to the FL-V series coils.
- Conforming to insulating type:B and incombustibility UL94V-0.



## ◆CORE STANDARD SPECIFICATIONS

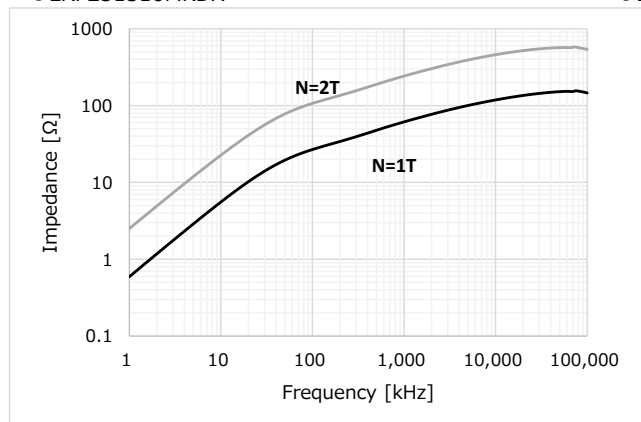
| Coil Part No. | Cross Sectional Area [cm <sup>2</sup> ] | Magnetic Path Length [cm] | Weight [g] | Outside Dimensions |               |        | Inductance Coefficient (AL Value [ $\mu\text{H}/\text{N}^2$ ] at 0A) |           |
|---------------|-----------------------------------------|---------------------------|------------|--------------------|---------------|--------|----------------------------------------------------------------------|-----------|
|               |                                         |                           |            | $\phi D$ [mm]      | $\phi d$ [mm] | W [mm] | 10 [kHz]                                                             | 100 [kHz] |
| LRF251510MKDX | 0.41                                    | 6.38                      | 21         | 28.3               | 12.7          | 12.3   | 83.7                                                                 | 25.9      |
| LRF251515MKDX | 0.63                                    | 6.38                      | 32         | 28.3               | 12.7          | 17.5   | 126.4                                                                | 39.2      |
| LRF322015MKDX | 0.69                                    | 8.09                      | 60         | 35.2               | 17.5          | 17.3   | 106.8                                                                | 33.1      |
| LRF372315MKDX | 0.83                                    | 9.33                      | 80         | 40.5               | 19.5          | 18.0   | 114.9                                                                | 35.6      |
| LRF462715MKDX | 1.14                                    | 11.47                     | 98         | 49.4               | 22.7          | 18.0   | 124.8                                                                | 38.7      |
| LRF462725MKDX | 1.90                                    | 11.47                     | 162        | 49.4               | 22.7          | 28.0   | 208.4                                                                | 64.6      |
| LRF624520MKDX | 1.36                                    | 16.81                     | 173        | 66.0               | 41.0          | 24.0   | 104.1                                                                | 32.3      |

## ◆DIMENSIONS OF CORE

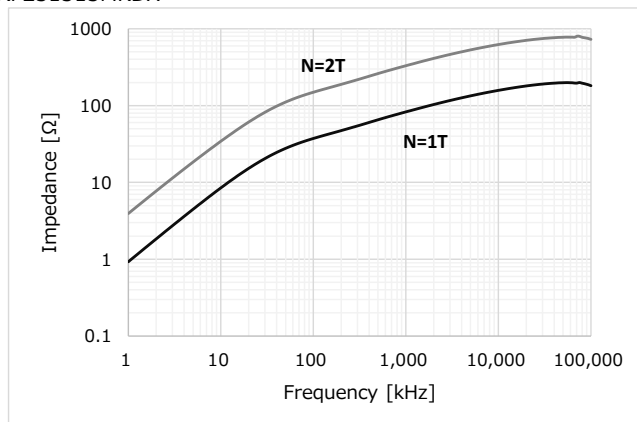


### Frequency impedance characteristics

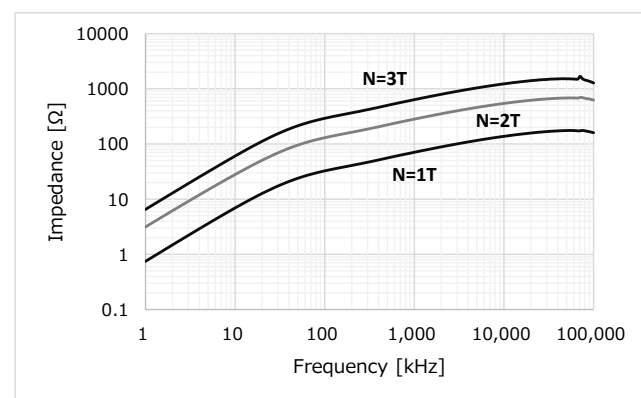
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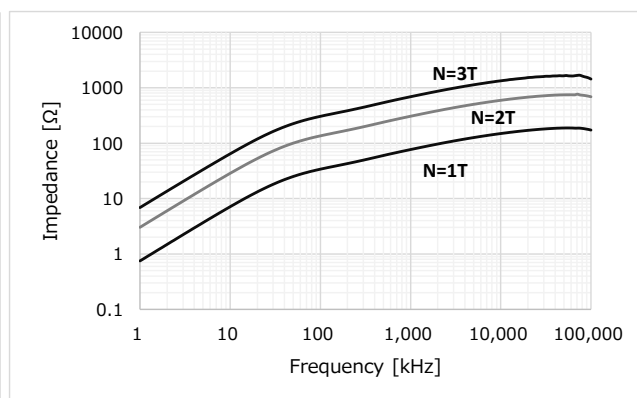
●LRF251515MKDX



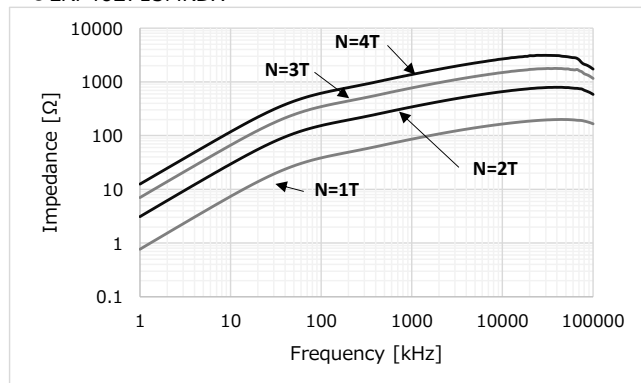
●LRF322015MKDX



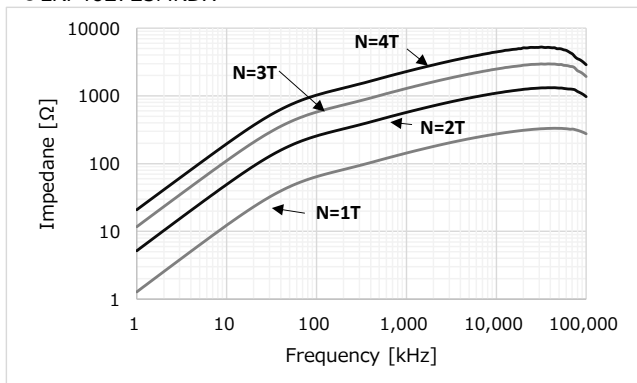
●LRF372315MKDX



●LRF462715MKDX



●LRF462725MKDX



●LRF624520MKDX

