

FL Series

Standard type for single phase

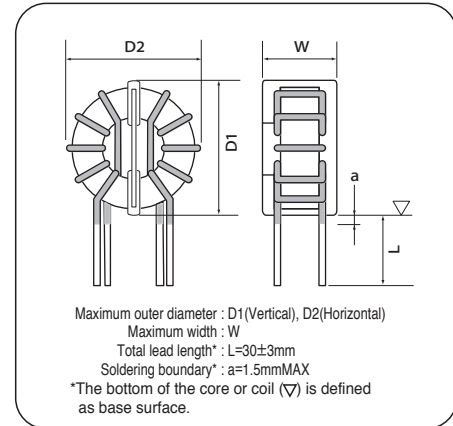
◆ MAJOR USES

- Common mode noise filter for AC/DC

◆ FEATURES

- Achieved significant miniaturization due to high permeability core
- High inductance in spite of a small number of turns
- Low temperature rise due to low D.C. resistance
- Stable frequency performance of noise suppression in wide frequency range
- Excellent temperature characteristics

◆ COIL STANDARD SPECIFICATIONS

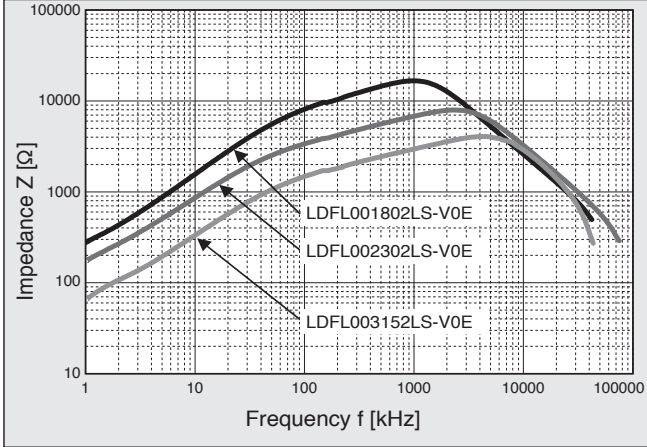


Coil Part No. (Old Coil Part No.)	Rated Current A	Inductance		D.C.R. mΩ (max)	Winding mm φ × lines	Outside Dimensions		
		10kHz (Typical) mH	100kHz (Rating) mH			D1 mm	D2 mm	W mm
● LDFL001802LS-V0E (FL01393LSPBF)	1	28.0	8.0	200	0.35 × 1P	15.0	16.0	11.9
● LDFL002302LS-V0E (FL02173LSPBF)	2	11.6	3.0	85	0.45 × 1P	15.0	16.0	11.9
● LDFL003152LS-V0E (FL03872LSPBF)	3	5.6	1.5	45	0.55 × 1P	15.0	16.0	11.9
LDFL003552L5-V0E (FL03552L5PBF)	3	22.0	5.5	56	0.7 × 1P	28.0	29.0	15.0
LDFL003153L6-V0E (FL03153L6PBF)	3	60.0	15.0	82	0.7 × 1P	29.0	30.5	20.5
LDFL005132L5-V0E (FL05132L5PBF)	5	5.4	1.3	16	1.0 × 1P	29.0	30.0	15.0
LDFL005332L6-V0E (FL05332L6PBF)	5	13.0	3.3	21	1.0 × 1P	29.0	30.5	20.0
LDFL005302LT-V0E (FL05302LTPBF)	5	13.0	3.0	17	1.1 × 1P	34.0	36.0	20.0
LDFL005502LT-V0E (FL05502LTPBF)	5	23.0	5.0	23	1.1 × 1P	34.5	36.5	20.5
LDFL005103LR-V0E (FL05103LRPBF)	5	39.0	10.0	33	1.1 × 1P	39.0	41.0	25.5
LDFL008451L5-V0E (FL08451L5PBF)	8	1.8	0.45	6.5	1.3 × 1P	29.5	31.0	15.0
LDFL008102L6-V0E (FL08102L6PBF)	8	4.2	1.0	9	1.3 × 1P	29.5	31.5	20.5
LDFL010102LT-V0E (FL10102LTPBF)	10	5.8	1.0	8	1.5 × 1P	34.0	38.0	22.0
LDFL010302LT-V0E (FL10302LTPBF)	10	13.0	3.0	11	1.4 × 1P	36.0	38.0	22.0
LDFL010502LR-V0E (FL10502LRPBF)	10	24.0	5.0	15	1.5 × 1P	40.0	43.0	27.0
LDFL010103LJ-V0E (FL10103LJPBF)	10	46.5	10.0	20	1.5 × 1P	46.5	47.5	27.5
LDFL015102LT-V0E (FL15102LTPBF)	15	3.7	1.0	6	1.6 × 1P	34.5	38.0	20.5
LDFL015302LR-V0E (FL15302LRPBF)	15	15.0	3.0	10	1.8 × 1P	40.0	42.5	29.0
LDFL015502LJ-V0E (FL15502LJPBF)	15	24.8	5.0	11	1.8 × 1P	47.0	49.0	28.0
LDFL020102LR-V0E (FL20102LRPBF)	20	4.2	1.0	5	1.5 × 2P	42.5	43.0	28.0
LDFL020302LJ-V0E (FL20302LJPBF)	20	13.5	3.0	7	1.5 × 2P	46.5	48.0	30.0
LDFL025252LJ-V0E (FL25252LJPBF)	25	11.6	2.5	5	1.6 × 2P	47.0	49.0	31.0
LDFL030102LR-V0E (FL30102LRPBF)	30	4.2	1.0	5	1.7 × 2P	39.5	44.0	29.5
LDFL030202LJ-V0E (FL30202LJPBF)	30	9.9	2.0	6	1.7 × 2P	47.0	48.5	31.0

The total lead length of the items marked with ● is 15±3mm.

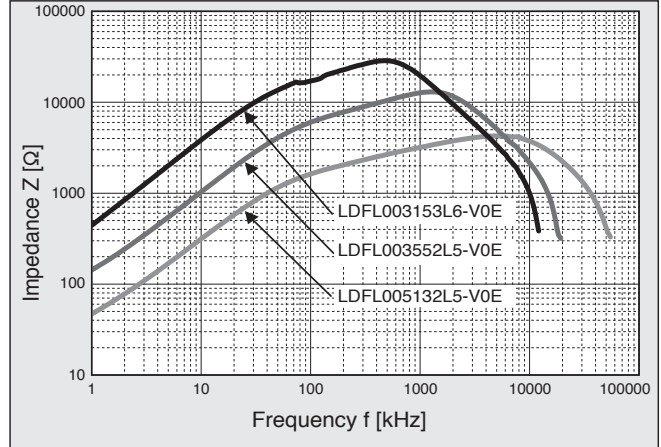
◆FREQUENCY - IMPEDANCE CHARACTERISTICS (1)

●Rated Current: 1, 2, 3 [A]



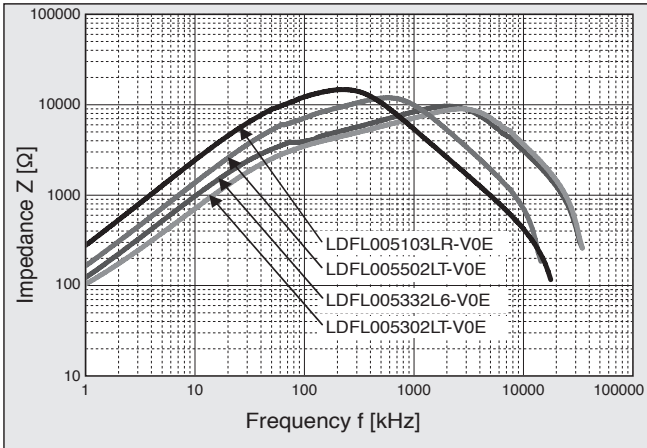
◆FREQUENCY - IMPEDANCE CHARACTERISTICS (2)

●Rated Current: 3, 5 [A]



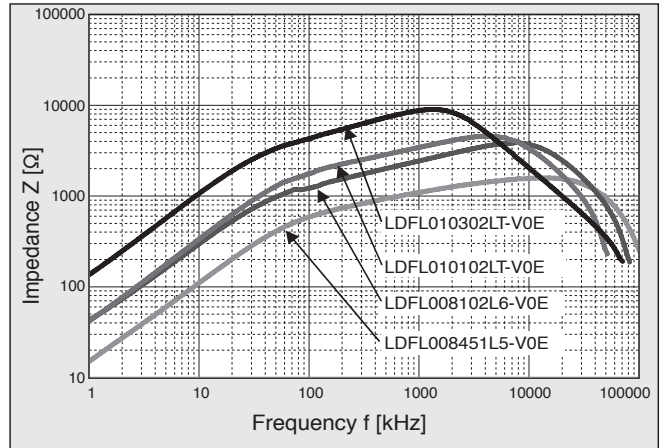
◆FREQUENCY - IMPEDANCE CHARACTERISTICS (3)

●Rated Current: 5 [A]



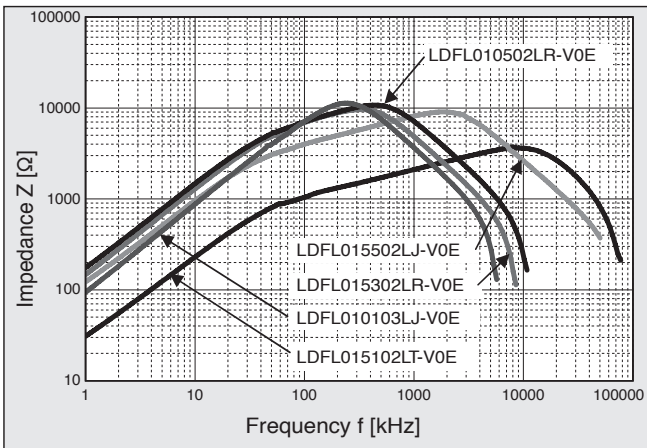
◆FREQUENCY - IMPEDANCE CHARACTERISTICS (4)

●Rated Current: 8, 10 [A]



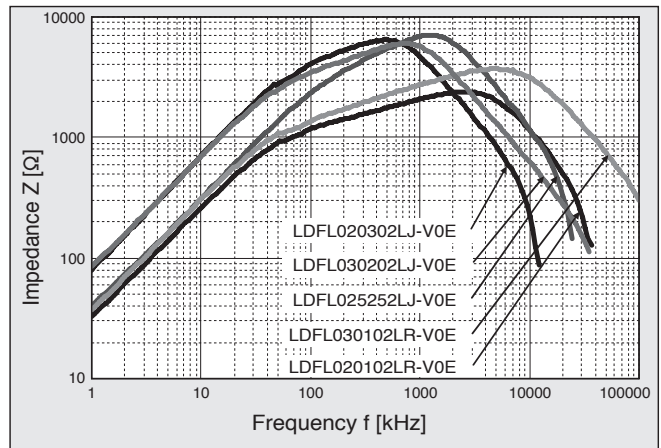
◆FREQUENCY - IMPEDANCE CHARACTERISTICS (5)

●Rated Current: 10, 15 [A]



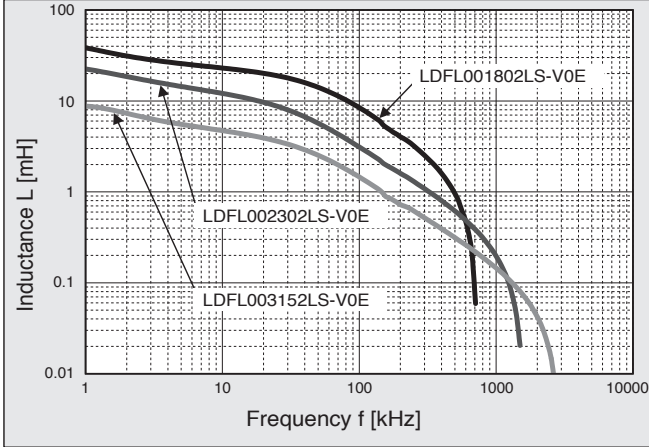
◆FREQUENCY - IMPEDANCE CHARACTERISTICS (6)

●Rated Current: 20, 25, 30 [A]



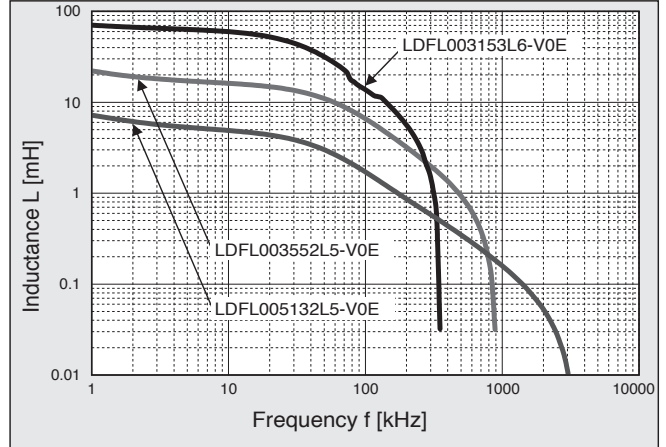
◆FREQUENCY - INDUCTANCE CHARACTERISTICS (1)

●Rated Current: 1, 2, 3 [A]



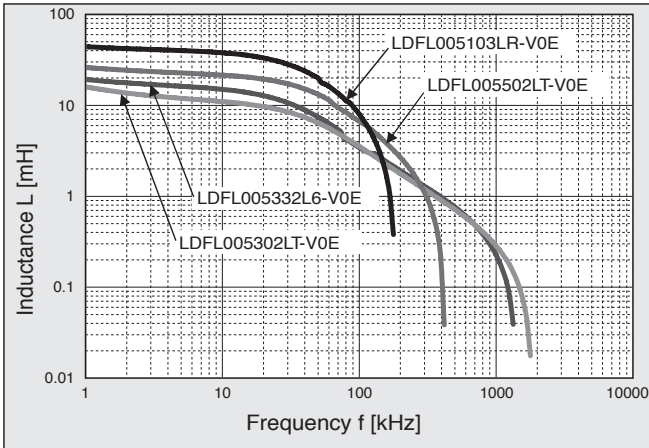
◆FREQUENCY - INDUCTANCE CHARACTERISTICS (2)

●Rated Current: 3, 5 [A]



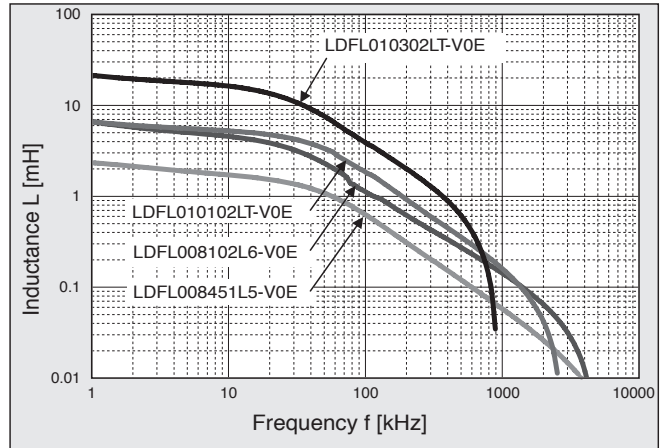
◆FREQUENCY - INDUCTANCE CHARACTERISTICS (3)

●Rated Current: 5 [A]



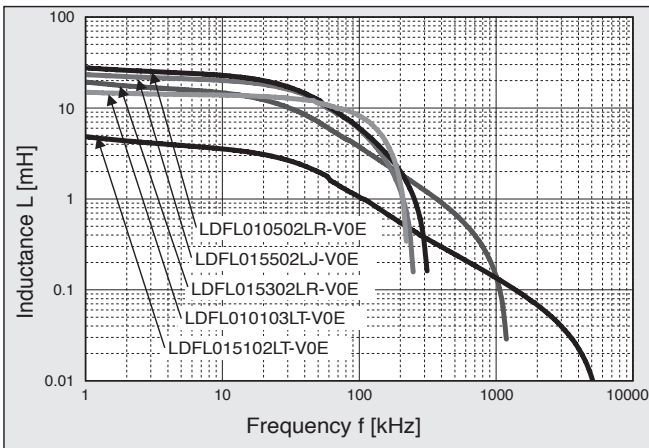
◆FREQUENCY - INDUCTANCE CHARACTERISTICS (4)

●Rated Current: 8, 10 [A]



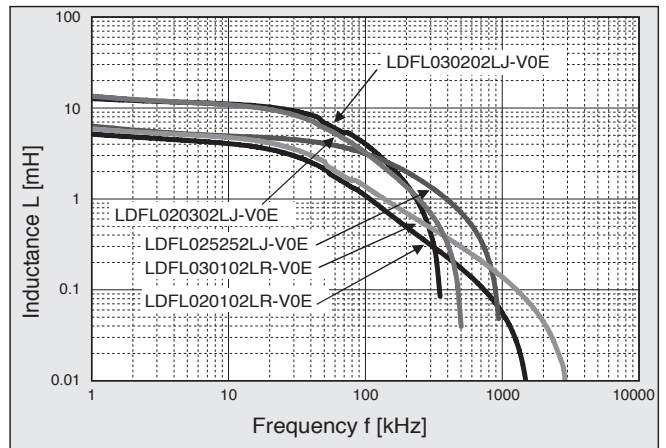
◆FREQUENCY - INDUCTANCE CHARACTERISTICS (5)

●Rated Current: 10, 15 [A]



◆FREQUENCY - INDUCTANCE CHARACTERISTICS (6)

●Rated Current: 20, 25, 30 [A]



FL Series

High voltage type for single phase

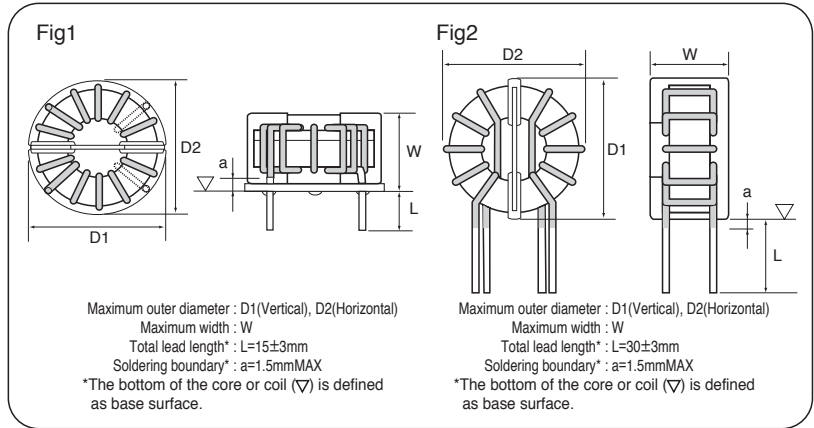
◆ MAJOR USES

- Common mode noise filter for AC/DC

◆ FEATURES

- Applicable to input voltage (700V)
- Achieved significant miniaturization due to high permeability core
- High inductance in spite of a small number of turns
- Low temperature rise due to low D.C. resistance
- Stable frequency performance of noise suppression in wide frequency range
- Excellent temperature characteristics

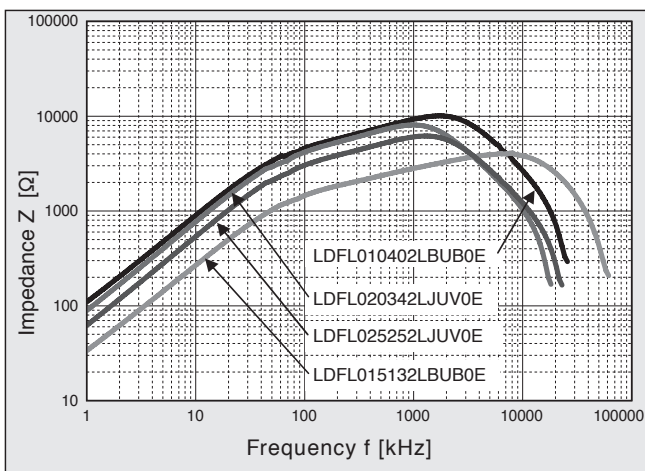
◆ COIL STANDARD SPECIFICATIONS



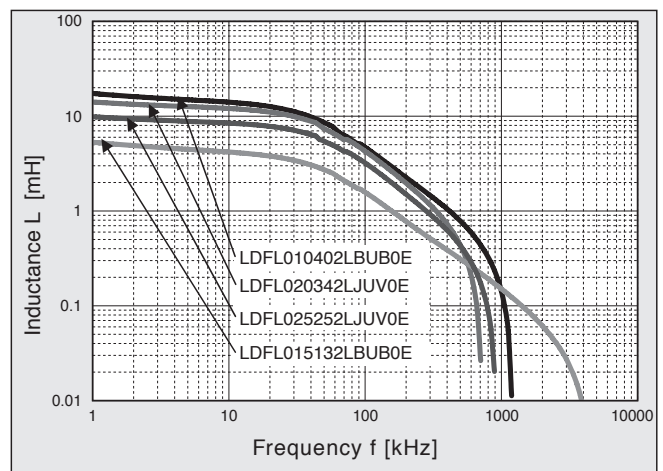
Coil Part No. (Old Coil Part No.)	Rated Current A	Inductance		D.C.R. mΩ (max)	Winding mm φ × lines	Outside Dimensions			
		10kHz (Typical)	100kHz (Rating)			D1 mm	D2 mm	W mm	Dimensions
		mH	mH						
LDFL010402LBUB0E (FL10402LBUBPBF)	10	16.0	4.0	12	1.5 × 1P	42.0	42.0	32.0	Fig1
LDFL015132LBUB0E (FL15132LBUBPBF)	15	5.1	1.3	6	1.9 × 1P	42.0	42.0	32.5	Fig1
LDFL020342LJUV0E (FL20342LJUPBF)	20	13.5	3.4	8	1.4 × 2P	49.0	49.0	31.0	Fig2
LDFL025252LJUV0E (FL25252LJUPBF)	25	9.9	2.5	6	1.6 × 2P	50.0	50.0	32.0	Fig2

LDFL010402LBUB0E, LDFL015132LBUB0E listed in the above table are coils of lying type with pedestal.
For LDFL020342LJUV0E, LDFL025252LJUV0E, lying type is also available. "V" changes into "H" in last the third digit of the name of items.

◆ FREQUENCY - IMPEDANCE CHARACTERISTICS



◆ FREQUENCY - INDUCTANCE CHARACTERISTICS



FL Series

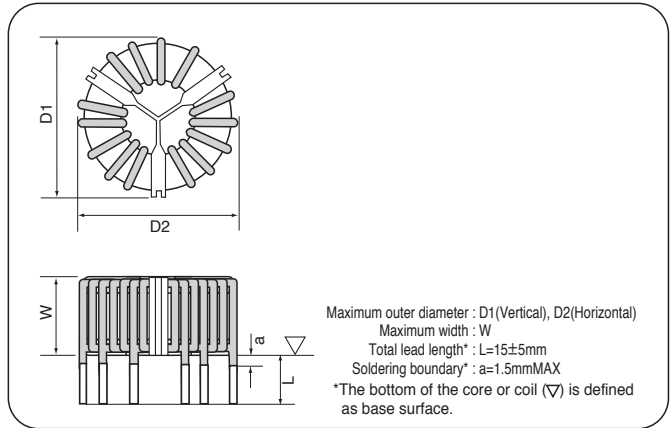
For three-phase circuit

◆ MAJOR USES

- Common mode noise filter for AC/DC

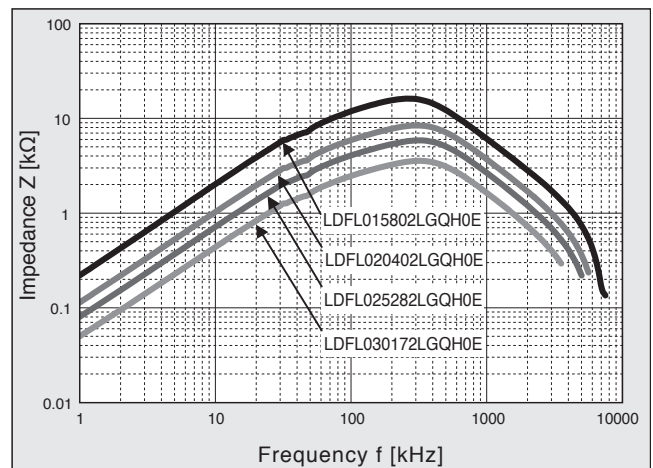
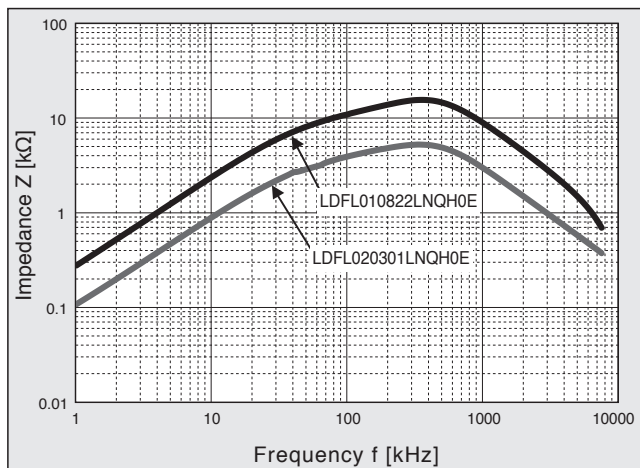
◆ FEATURES

- Achieved significant miniaturization due to high permeability core
- High inductance in spite of a small number of turns
- Low temperature rise due to low D.C. resistance
- Stable frequency performance of noise suppression in wide frequency range
- Excellent temperature characteristics



Coil Part No. (Old Coil Part No.)	Rated Current A	Inductance		D.C.R. mΩ (max)	Winding mm φ × lines	Outside Dimensions		
		10kHz (Typical)	100kHz (Rating)			D1 mm	D2 mm	W mm
		mH	mH					
LDFL010822LNQH0E (FL10822LNQPBF)	10	27.0	8.2	18	1.5 × 1P	56.0	56.0	32.0
LDFL020302LNQH0E (FL20302LNQPBF)	20	11.0	3.0	6	2.0 × 1P	56.0	56.0	32.0
LDFL015802LGQH0E (FL15802LGQPBF)	15	30.0	8.0	15	2.0 × 1P	65.0	65.0	35.0
LDFL020402LGQH0E (FL20402LGQPBF)	20	16.0	4.0	6	2.3 × 1P	65.0	65.0	35.0
LDFL025282LGQH0E (FL25282LGQPBF)	25	10.0	2.8	5	1.8 × 2P	65.0	65.0	35.0
LDFL030172LGQH0E (FL30172LGQPBF)	30	7.0	1.7	4	2.0 × 2P	65.0	65.0	35.0

◆ COIL STANDARD SPECIFICATIONS



The FM series coils are made of nano-crystal.

◆ MAJOR USES

- Common mode noise filter for AC/DC
- Zero-phase reactor

◆ FEATURES

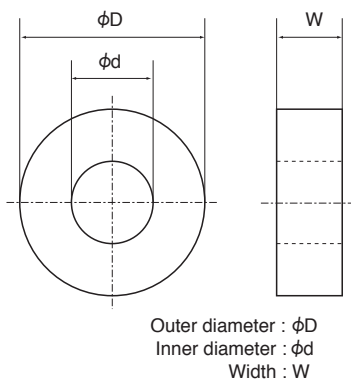
- High impedance in spite of a small number of turns
- Excellent temperature characteristics



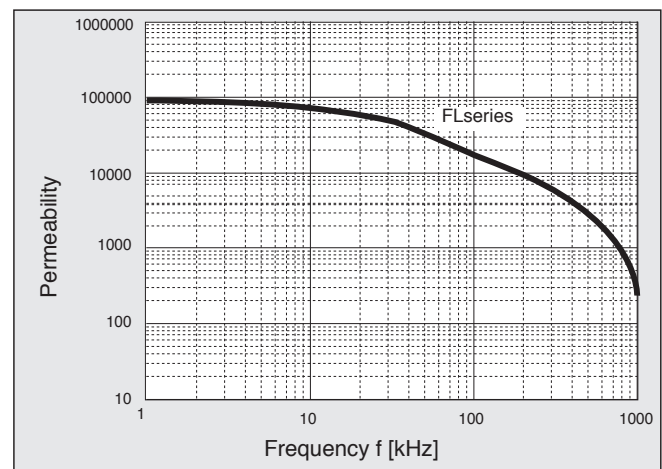
◆ CORE STANDARD SPECIFICATIONS

Core Part No. (Old Core Part No.)	Cross Sectional Area cm ²	Magnetic Path Length cm	Weight g	Outside Dimensions			Inductance Coefficient (AL Value) [μH/100kHz at 0A]
				φD mm	φd mm	W mm	
LRF251515MKX (F251515MKX)	0.63	6.40	35	28.3	12.7	17.5	18.3
LRF322015MKX (F322015MKX)	0.73	8.17	50	35.2	17.5	17.3	16.6
LRF372315MKX (F372315MKX)	0.85	9.42	67	40.5	19.5	18.0	17.2
LRF462715MKX (F462715MKX)	1.15	11.50	110	49.4	22.7	18.0	18.6
LRF462725MKX (F462725MKX)	1.92	11.50	176	49.4	22.7	28.0	31.0
LRF603525MKX (F603525MKX)	2.53	14.90	310	66.7	29.3	29.2	31.6
LRF624520MKX (F624520MKX)	1.36	16.80	200	66.0	41.0	24.0	15.2

◆ DIMENSIONS OF CORE

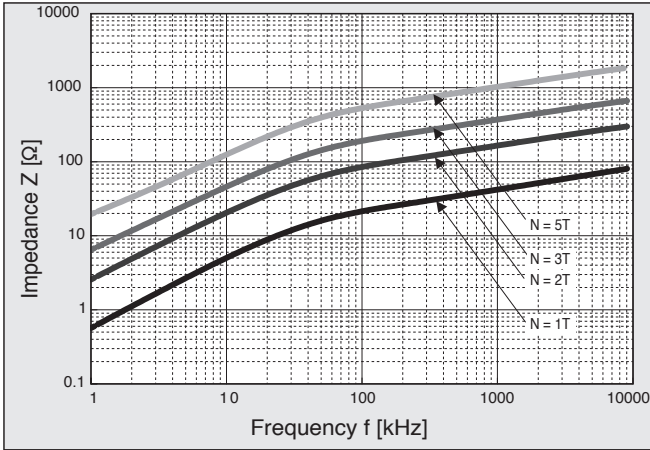


◆ FREQUENCY - PERMEABILITY CHARACTERISTICS



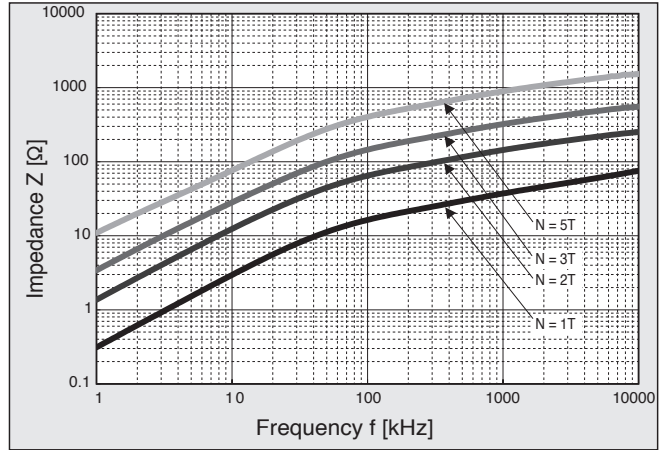
◆ FREQUENCY - IMPEDANCE CHARACTERISTICS (1)

● LRF251515MKX



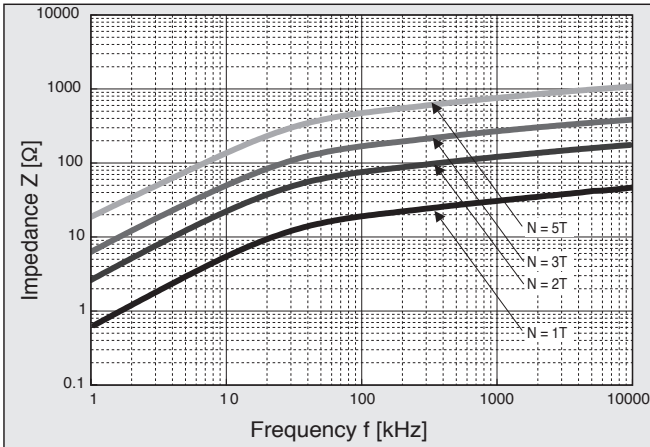
◆ FREQUENCY - IMPEDANCE CHARACTERISTICS (2)

● LRF322015MKX



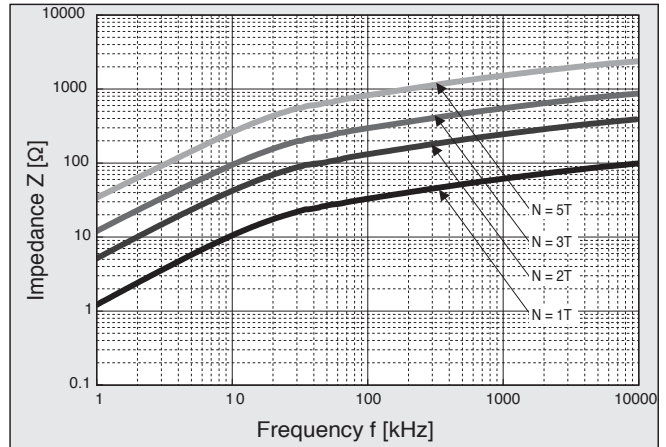
◆ FREQUENCY - IMPEDANCE CHARACTERISTICS (3)

● LRF372315MKX



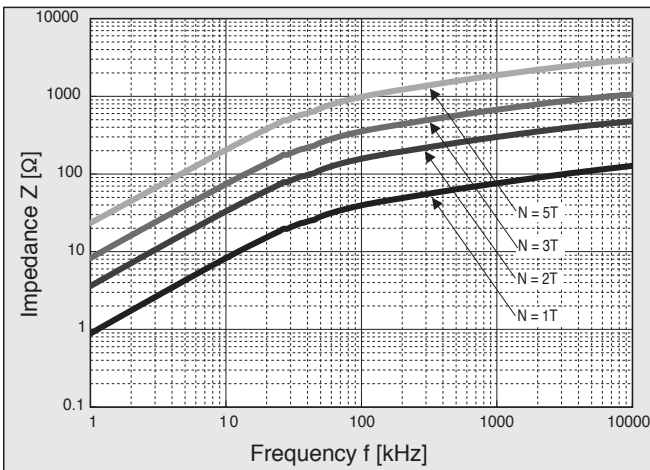
◆ FREQUENCY - IMPEDANCE CHARACTERISTICS (4)

● LRF462725MKX



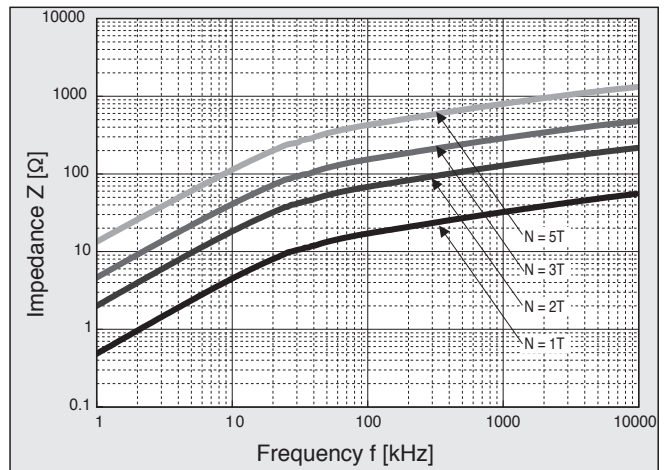
◆ FREQUENCY - IMPEDANCE CHARACTERISTICS (5)

● LRF603525MKX



◆ FREQUENCY - IMPEDANCE CHARACTERISTICS (6)

● LRF624520MKX



FL Series

◆ MAJOR USES

- Zero-phase reactor
- Common mode noise filter for AC/DC

◆ FEATURES

- Case with a hole to secure the chassis
- High impedance in spite of a small number of turns
- Excellent temperature characteristics



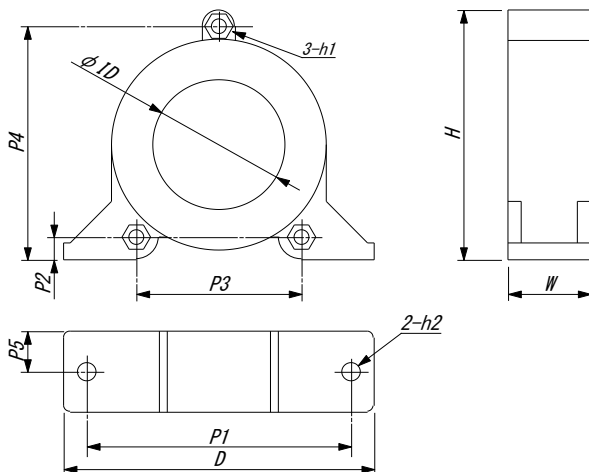
◆ CORE STANDARD SPECIFICATIONS

Core Part No.	Cross Sectional Area [cm ²]	Magnetic Path Length [cm]	AL [μH/at 0A]	
			10kHz	100kHz
LRF604520MBX	1.2typ.	16.4typ.	77.0typ.	13.0typ.
LRF1108020MBX	2.2typ.	30.0typ.	85.0typ.	15.0typ.

Core Part No.	Outside Dimensions [mm]								
	D	φID	H	W	P1	P2	P3	P4	P5
LRF604520MBX	95max.	39.5min.	78max.	26max.	80±0.5	7±0.5	50±0.5	72±0.5	12.5±0.3
LRF1108020MBX	181max.	74min.	131max.	26max.	150±0.5	20±0.5	100±0.5	124±0.5	12.5±0.3

Core Part No.	Applicable screws	
	h1	h2
LRF604520MBX	M4	M5
LRF1108020MBX	M5	M6

◆ DIMENSIONS OF CORE



◆ FREQUENCY - IMPEDANCE CHARACTERISTICS (number of turns 1T)

