

Lead Type Line Filters

■ Toroidal AC Line Filters LF Series(環形交流線性濾波器-----LF 系列)

● Features(特徵):



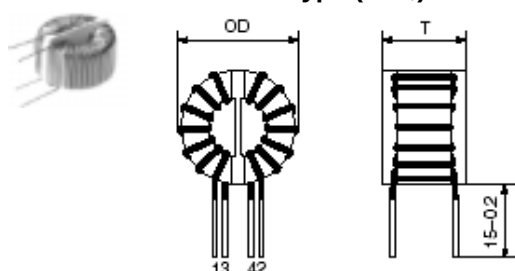
1. Excellent frequency characteristics.
(极好的頻率特性。)
2. Self electromagnetic shielding.
(自我的磁遮蔽。)

● Applications(應用):

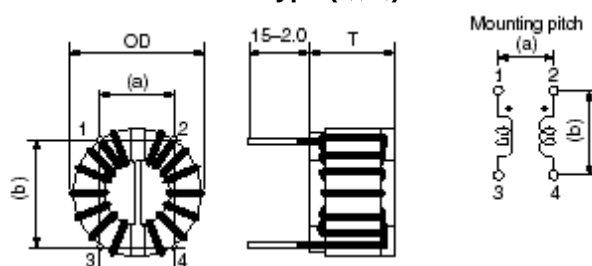
Power switching , TV game, Monitor, Car recharger, etc. Design as Customer's Requested Specifications.
電源供應器、電動玩具、監視台、汽車充電器等。根據客戶需求設計

● LF- Coils Standard Type (LF 線圈標準類型)

LF-Vertical Type (立式):



LF-Horizontal Type (臥式):



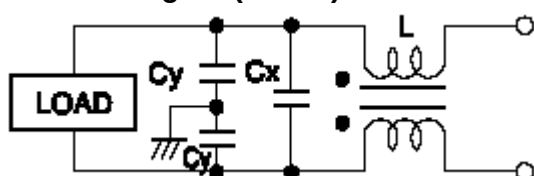
Specification (規格):

Part No.	Rated current (Amp)	Inductance (mH) Min	DC resistance (mOhms /line) max	Temperature rise (K) max	Finished dimensions (mm)				Wire size (mm)
					OD (max.)	T (max.)	a	b	
LF-020-102S	2	1	110	40	23	13	10	13	0.6
LF-020-202S	2	2	110	40	23	18.5	10	19	0.6
LF-020-302S	2	3	100	40	27	20	10	19	0.6
LF-020-502S	2	5	100	45	27	20	10	19	0.6
LF-020-802S	2	8	150	40	34	23	18	21	0.6
LF-050-102S	5	1	50	40	25	18.5	10	19	0.8
LF-050-202S	5	2	70	40	32	22	18	21	0.8
LF-050-502S	4	5	80	50	34	23	18	21	0.8
LF-050-802S	4	8	85	60	34	23	18	21	0.8
LF-100-102S	10	1	20	40	34	24	22	21	1.3
LF-100-202S	10	2	28	40	47	27	30	30	1.3
LF-150-102S	15	1	12	40	49	27	35	35	1.8
LF-150-202S	15	2	12	45	50	28	35	35	1.8
LF-200-102S	20	1	8	45	60	30	40	49	2.3
LF-300-102S	30	1	6	40	62	35	55	20	2.6

Note(備注):

- 1, Rated voltage: 250VAC/VDC.
- 2, Withstanding voltage: 2000VAC (one minute, between lines).
- 3, Insulation resistance: at 500VDC, more than 100MOhms (between lines).
- 4, Thermal class: A (105°C).
- 5, Operating temperature range (°C): -25 to T (T=105-temperature rise).

Circuit Diagram(線路圖):

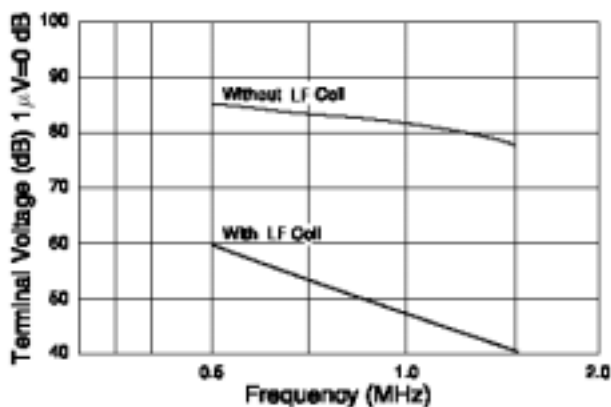


L: LF-05-102
Cx: 0.1uF
Cy: 4700pF

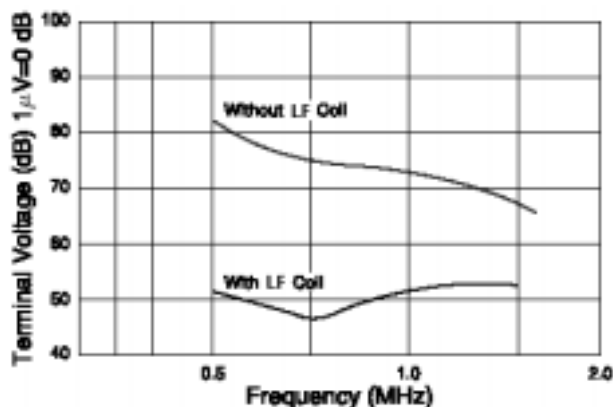
Lead Type Line Filters

Attenuation (Static Characteristics) : 衰減(靜態電性)

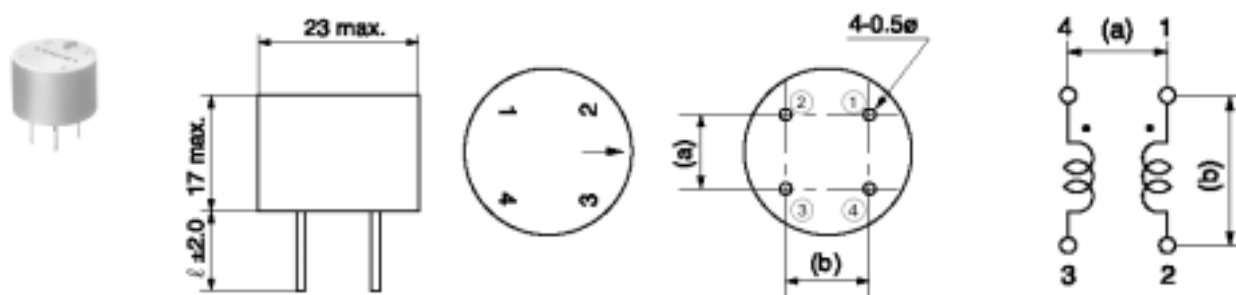
Switching power supply (開關電源)



Motor (電動機)



• LF-Coils Case Type (LF 線圈帶 CASE 類型)



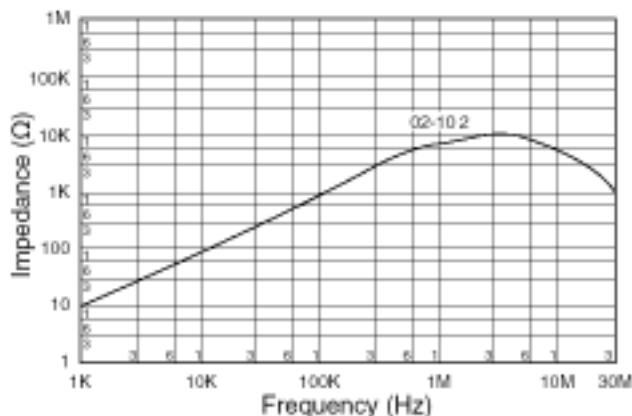
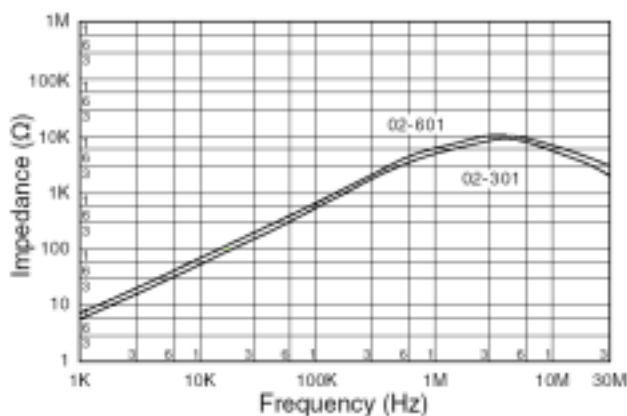
Specification (規格):

Part No.	Rated current (Amp)	Inductance (mH) Min	DC resistance (mOhms /line) max	Temperature rise (K) max	Finished dimensions (mm)			Wire size (mm)
					a	b	l	
LF-020-301C	2	0.3	100	40	8	10	10	0.8
LF-020-601C	2	0.6	120	40	8	10	10	0.8
LF-020-102C	2	1.0	150	40	8	10	10	0.8

Note(備注):

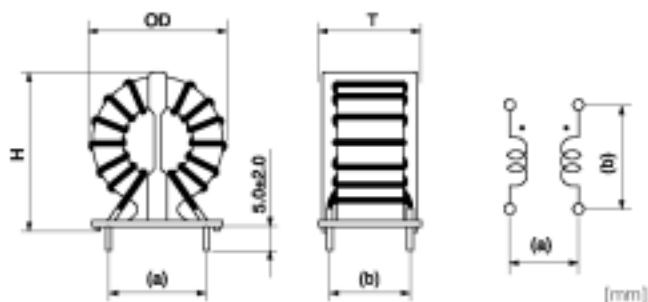
- 1, Rated voltage: 250VAC/VDC.
- 2, Withstanding voltage: 2000VAC (one minute, between lines).
- 3, Insulation resistance: at 500VDC, more than 100MOhms(between lines).
- 4, Thermal class: A (105°C).
- 5, Operating temperature range (°C): -25 to T (T=105-temperature rise)

Impedance vs. Frequency



Lead Type Line Filters

• LF-Coils Terminal Base Type (LF 線圈帶 BASE 類型)



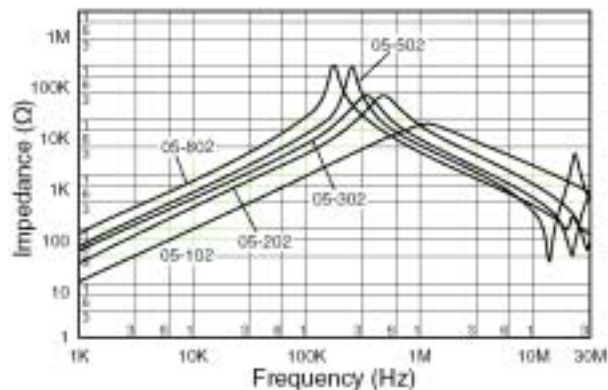
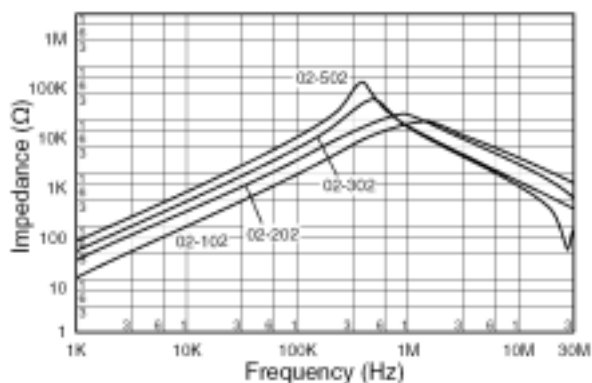
Specification (規格):

Part No.	Rated current (Amp)	Inductance (mH) Min	DC resistance (mOhms /line) max	Temperature rise (K) max	Finished dimensions (mm)					Wire size (mm)
					OD (max)	T (max)	H (max)	a	b	
LF-020-102B	2	1.0	100	40	25	20	27	10	15	0.6
LF-020-202B	2	2.0	110	40	25	20	27	10	15	0.6
LF-020-302B	2	3.0	110	40	25	20	27	10	15	0.6
LF-020-502B	2	5.0	120	40	25	20	27	10	15	0.6
LF-050-102B	5	1.0	50	40	25	20	27	10	15	0.6
LF-050-202B	5	2.0	70	40	34	23	33	18	16	0.8
LF-050-302B	5	3.0	70	55	34	23	33	18	16	0.8
LF-040-502B	4	5.0	80	60	34	23	33	18	16	0.8
LF-040-802B	4	8.0	90	60	34	23	33	18	16	0.8
LF-100-102B	10	1.0	20	40	34	23	33	12	17	1.3
LF-100-202B	10	2.0	22	50	42	29	44	18	22	1.4
LF-120-152B	12	1.5	18	50	42	29	44	18	22	1.5
LF-150-501B	15	0.5	8	60	34	23	33	18	16	1.5
LF-150-102B	15	1.0	12	55	44	30	44	18	22	1.7
LF-180-501B	18	0.5	7	50	44	30	44	18	22	1.8

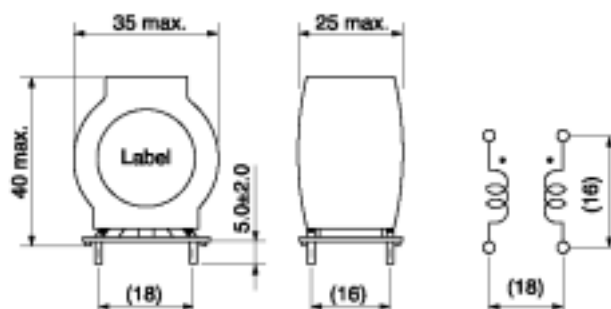
Note(備注):

- 1, Rated voltage: 250VAC/VDC.
- 2, Withstanding voltage: 2000VAC (one minute, between lines).
- 3, Insulation resistance: at 500VDC, more than 100MOhms(between lines).
- 4, Thermal class: B (120°C) or F (155°C).
- 5, Operating temperature range (°C): -25 to T (T=105-temperature rise *T=120-temperature rise).

Impedance vs. Frequency



• LF-Coils Tube (UL) Type (LF線圈加UL套管類型)



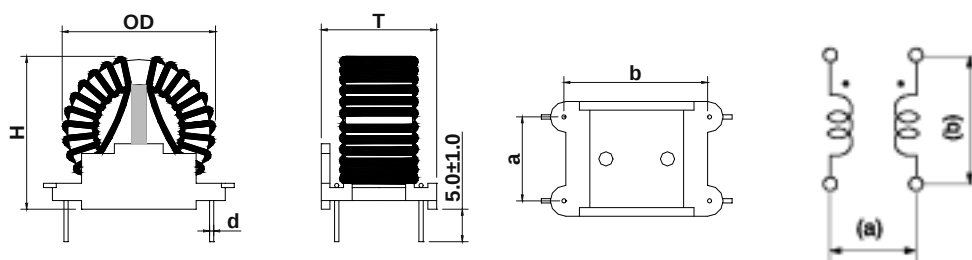
Specification (規格):

Part No.	Rated current (Amp)	Inductance (mH) Min	DC resistance (mOhms /line) max	Temperature rise (K) max	Wire size (mm)
LF-020-303U	2	30.0	300	45	0.6
LF-040-203U	4	20.0	150	55	0.8
LF-050-103U	5	10.0	100	55	0.9

Note(備注):

- 1, Rated voltage: 250VAC/VDC.
- 2, Withstanding voltage: 2000VAC (one minute, between lines).
- 3, Insulation resistance: at 500VDC, more than 100MOhms(between lines).
- 4, Thermal class: A (105°C).
- 5, Operating temperature range (°C): -25 to T (T=105–temperature rise *T=120–temperature rise).

• LF-Coils Standard Base Type (LF線圈標準基座類型)



Specification (規格):

Part No.	Rated current (Amp)	Inductance (mH) Min	DC Resistance (mOhms /line) max	Finished dimensions (mm)						Wire size (mm)
				OD Max	H Max	T Max	a	b	d	
LF-020-172B	2.0	1.70	65	28.8	31.2	16.9	10.2	20.3	Φ1.2	0.60
LF-030-102B	3.0	1.00	36	28.8	31.2	16.9	10.2	20.3	Φ1.2	0.80
LF-050-751B	5.0	0.75	22	28.8	31.2	16.9	10.2	20.3	Φ1.2	0.90
LF-080-421B	8.0	0.42	12	28.8	31.2	16.9	10.2	20.3	Φ1.2	1.20
LF-015-103B	1.5	10.0	290	32.6	35.6	22.9	15.2	22.9	Φ1.4	0.50
LF-020-702B	2.0	7.0	150	32.6	35.6	22.9	15.2	22.9	Φ1.4	0.60
LF-030-352B	3.0	3.5	80	32.6	35.6	22.9	15.2	22.9	Φ1.4	0.80
LF-050-222B	5.0	2.2	40	32.6	35.6	22.9	15.2	22.9	Φ1.4	0.90
LF-080-112B	8.0	1.1	20	32.6	35.6	22.9	15.2	22.9	Φ1.4	1.20
LF-130-561B	13.0	0.56	10	32.6	35.6	22.9	15.2	22.9	Φ1.4	1.40
LF-100-102B	10.0	1.0	15	46.5	48.3	24.1	17.8	30.5	Φ1.4	1.30
LF-130-102B	13.0	1.0	10	52.3	54.9	28.5	22.9	38.1	Φ1.4	1.40