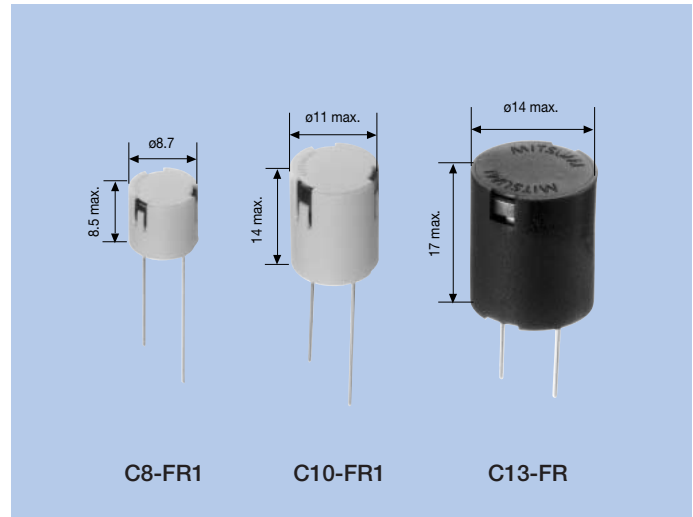


Power Inductors

C8-FR1, C10-FR1, C13-FR Series

OUTLINE

Power inductors for preventing the diffusion of noises generated from power circuits and suppressing noise components coming through the power lines.



FEATURES

1. Power inductors are made of materials resistible to a large current (5.0A max. to 9.0A max.) .
2. Winding start terminal can be indicated.
3. These products can be packaged by radial tapping for delivery.

USES

Power circuits of TV, VCR, display monitors, computers, and other units.

Power circuits of air conditioners, electric rice boilers, refrigerators, washing machines, cleaners, pots, and other devices.

SPECIFICATIONS

Type	Inductance	Rated Current (A)	DC Resistance (Ω)	Operational Frequency (kHz)	Pcs/Reel
C8-FR1 Series	2.2μH~3.3mH	0.14~5.00 (L=2.2μH)	0.018~11.0 (L=3.3mH)	10~500	1000
C10-FR1 Series	3.3μH~150mH	0.048~9.00 (L=3.3μH)	0.019~300.0 (L=150mH)	10~500	500
C13-FR Series	10μH~10mH	0.22~7.60 (L=10μH)	0.023~10.0 (L=10mH)	10~500	500

DATA LIST (C8-FR1 Series)

Distinctive Name	Marking	Inductance		Unloaded Q		Self Resonant Frequency	DC Resistance	Rated Current *		Remarks
		(μH) (f=1kHz)	Tolerance (%)	min.	Measured Frequency (MHz)			(MHz) min.	(Ω) max.	
						L	Temperature			
DE	2R2	2.2	±20	10	7.96	40	0.018	5.0	2.9	
DG	3R3	3.3	±15	10	7.96	34	0.021	4.5	2.7	
DH	3R9	3.9	±15	10	7.96	30	0.028	4.1	2.6	
DJ	4R7	4.7	±15	10	7.96	27	0.030	3.7	2.5	
DK	5R6	5.6	±15	10	7.96	23	0.032	3.4	2.4	
DL	6R8	6.8	±15	10	7.96	21	0.035	3.1	2.3	
DM	8R2	8.2	±15	10	7.96	19	0.038	2.6	2.1	
EA	100	10	±10	20	2.52	17	0.042	2.5	2.0	
EB	120	12	±10	20	2.52	15	0.057	2.3	1.9	
EC	150	15	±10	20	2.52	13	0.066	2.0	1.8	
ED	180	18	±10	20	2.52	12	0.071	1.8	1.6	
EE	220	22	±10	20	2.52	10	0.087	1.6	1.3	
EF	270	27	±10	20	2.52	9.0	0.14	1.4	1.2	
EG	330	33	±10	20	2.52	8.0	0.15	1.3	1.2	
EH	390	39	±10	20	2.52	7.1	0.17	1.2	1.1	
EJ	470	47	±10	20	2.52	6.5	0.18	1.1	1.0	
EK	560	56	±10	20	2.52	5.9	0.21	1.0	0.96	
EL	680	68	±10	20	2.52	5.4	0.24	0.91	0.90	
EM	820	82	±10	20	2.52	4.8	0.28	0.83	0.80	
FA	101	100	±10	20	0.796	4.4	0.32	0.75	0.72	
FB	121	120	±10	20	0.796	4.0	0.36	0.68	0.63	
FC	151	150	±10	20	0.796	3.6	0.44	0.61	0.57	
FD	181	180	±10	20	0.796	3.2	0.66	0.56	0.53	
FE	221	220	±10	15	0.796	2.9	0.73	0.50	0.50	
FF	271	270	±10	15	0.796	2.6	0.85	0.45	0.45	
FG	331	330	±10	15	0.796	2.4	1.1	0.41	0.41	
FH	391	390	±10	15	0.796	2.1	1.3	0.37	0.38	
FJ	471	470	±10	15	0.796	2.0	1.8	0.34	0.36	
FK	561	560	±10	15	0.796	1.8	1.9	0.31	0.33	
FL	681	680	±10	15	0.796	1.6	2.2	0.28	0.29	
FM	821	820	±10	15	0.796	1.4	2.9	0.25	0.26	
GA	102	1,000	±10	30	0.252	1.3	3.3	0.23	0.24	
GB	122	1,200	±10	30	0.252	1.2	4.4	0.21	0.22	
GC	152	1,500	±10	30	0.252	1.1	5.1	0.18	0.19	
GD	182	1,800	±10	30	0.252	1.0	5.8	0.16	0.16	
GE	222	2,200	±10	50	0.252	0.88	8.0	0.14	0.15	
GF	272	2,700	±10	50	0.252	0.79	9.5	0.14	0.13	
GG	332	3,300	±10	50	0.252	0.71	11.0	0.14	0.12	

* Rated current (L value) : A current value obtained when the inductance value has dropped by 10% of the initial value in DC superimposition characteristic.

Rated current (temperature) : A current value where the temperature rise becomes 20°C when flowing a current at normal temperature.

DATA LIST (C10-FR1 Series)

Distinctive Name	Marking	Inductance		Unloaded Q		Self Resonant Frequency	DC Resistance	Rated Current *		Remarks
		(μH) (f=1kHz)	Tolerance (%)	min.	Measured Frequency (MHz)	(MHz) min.	(Ω) max.	(A)		
								L	Temperature	
DG	3R3	3.3	±20	20	7.96	46	0.019	9.0	4.2	
DH	3R9	3.9	±20	20	7.96	40	0.022	8.0	4.1	
DJ	4R7	4.7	±20	20	7.96	38	0.024	7.1	4.0	
DK	5R6	5.6	±20	20	7.96	34	0.025	6.7	3.8	
DL	6R8	6.8	±20	20	7.96	30	0.028	6.3	3.4	
DM	8R2	8.2	±20	20	7.96	24	0.031	5.5	3.3	
EA	100	10	±10	50	2.52	19	0.034	4.7	3.2	
EB	120	12	±10	50	2.52	16	0.038	4.4	2.8	
EC	150	15	±10	60	2.52	12	0.042	4.3	2.6	
ED	180	18	±10	60	2.52	9.2	0.046	3.9	2.4	
EE	220	22	±10	60	2.52	8.6	0.061	3.4	2.1	
EF	270	27	±10	60	2.52	7.1	0.069	3.0	2.0	
EG	330	33	±10	50	2.52	6.8	0.078	2.7	1.9	
EH	390	39	±10	50	2.52	6.7	0.085	2.5	1.8	
EJ	470	47	±10	40	2.52	6.2	0.093	2.3	1.7	
EK	560	56	±10	40	2.52	5.2	0.10	2.1	1.6	
EL	680	68	±10	40	2.52	4.6	0.12	2.0	1.5	
EM	820	82	±10	40	2.52	4.2	0.13	1.8	1.4	
FA	101	100	±10	40	0.796	3.8	0.18	1.5	1.2	
FB	121	120	±10	40	0.796	3.2	0.25	1.4	1.0	
FC	151	150	±10	40	0.796	2.9	0.29	1.3	0.95	
FD	181	180	±10	40	0.796	2.6	0.40	1.2	0.80	
FE	221	220	±10	40	0.796	2.3	0.44	1.1	0.75	
FF	271	270	±10	40	0.796	2.1	0.50	1.0	0.70	
FG	331	330	±10	30	0.796	2.0	0.56	0.91	0.68	
FH	391	390	±10	30	0.796	1.8	0.62	0.82	0.63	
FJ	471	470	±10	30	0.796	1.7	0.84	0.77	0.57	
FK	561	560	±10	30	0.796	1.5	0.93	0.70	0.52	
FL	681	680	±10	30	0.796	1.4	1.0	0.66	0.48	
FM	821	820	±10	30	0.796	1.3	1.4	0.52	0.42	
GA	102	1,000	±5	50	0.252	1.2	1.8	0.49	0.41	
GB	122	1,200	±5	50	0.252	0.87	1.8	0.49	0.41	
GC	152	1,500	±5	50	0.252	0.83	2.7	0.40	0.30	
GD	182	1,800	±5	50	0.252	0.75	3.0	0.37	0.29	
GE	222	2,200	±5	50	0.252	0.70	3.9	0.33	0.25	
GF	272	2,700	±5	50	0.252	0.67	4.3	0.32	0.24	
GG	332	3,300	±5	50	0.252	0.56	5.8	0.30	0.21	

* Rated current (L value) : A current value obtained when the inductance value has dropped by 10% of the initial value in DC superimposition characteristic.

Rated current (temperature) : A current value where the temperature rise becomes 20°C when flowing a current at normal temperature.

DATA LIST (C10-FR1 Series)

Distinctive Name	Marking	Inductance		Unloaded Q		Self Resonant Frequency	DC Resistance	Rated Current *		Remarks
		(μH) (f=1kHz)	Tolerance (%)	min.	Measured Frequency (MHz)	(MHz) min.	(Ω) max.	(A)		
								L	Temperature	
GH	392	3,900	±5	50	0.252	540	6.4	0.28	0.20	
GJ	472	4,700	±5	50	0.252	490	7.1	0.25	0.19	
GK	562	5,600	±5	50	0.252	410	9.0	0.22	0.17	
GL	682	6,800	±5	50	0.252	380	10	0.21	0.16	
GM	822	8,200	±5	50	0.252	360	12	0.19	0.15	
HA	103	10,000	±5	60	0.0796	290	19	0.15	0.12	
HB	123	12,000	±5	60	0.0796	270	21	0.14	0.11	
HC	153	15,000	±5	60	0.0796	240	34	0.13	0.090	
HD	183	18,000	±5	60	0.0796	210	38	0.12	0.081	
HE	223	22,000	±5	60	0.0796	200	43	0.11	0.075	
HF	273	27,000	±5	60	0.0796	150	67	0.098	0.060	
HG	333	33,000	±5	40	0.0796	140	76	0.094	0.056	
HH	393	39,000	±5	40	0.0796	130	84	0.084	0.053	
HJ	473	47,000	±5	40	0.0796	120	96	0.075	0.050	
HK	563	56,000	±5	40	0.0796	100	170	0.072	0.036	
HL	683	68,000	±5	30	0.0796	95	200	0.071	0.035	
HM	823	82,000	±5	30	0.0796	88	210	0.063	0.033	
JA	104	100,000	±5	30	0.0252	85	240	0.058	0.031	
JB	124	120,000	±5	30	0.0252	70	260	0.053	0.030	
JC	154	150,000	±5	30	0.0252	69	300	0.048	0.028	

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Rated current (temperature) : A current value where the temperature rise becomes 20°C when flowing a current at normal temperature.

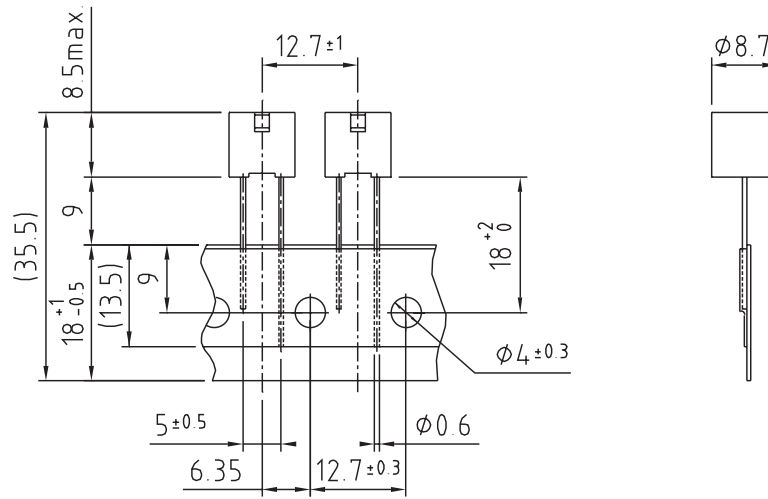
DATA LIST (C13-FR Series)

Distinctive Name	Marking	Inductance		Unloaded Q		Self Resonant Frequency	DC Resistance	Rated Current *		Remarks
		(μH) (f=1kHz)	Tolerance (%)	min.	Measured Frequency (MHz)	(MHz) min.	(Ω) max.	(A)		
								L	Temperature	
EA	100	10	±10	60	2.52	19	0.023	7.6	4.5	
EC	150	15	±10	60	2.52	12	0.028	6.2	4.0	
EE	220	22	±10	60	2.52	7.6	0.035	4.9	3.4	
EG	330	33	±10	50	2.52	6.9	0.043	4.1	3.2	
EJ	470	47	±10	40	2.52	5.6	0.052	3.5	2.8	
EL	680	68	±10	30	2.52	4.4	0.070	3.0	2.4	
FA	101	100	±10	50	0.796	3.3	0.12	2.2	2.0	
FC	151	150	±10	50	0.796	2.6	0.19	1.9	1.5	
FE	221	220	±10	40	0.796	2.2	0.23	1.5	1.3	
FG	331	330	±10	30	0.796	1.8	0.35	1.3	1.1	
FJ	471	470	±10	20	0.796	1.5	0.43	1.1	0.90	
FL	681	680	±10	20	0.796	1.2	0.61	0.95	0.80	
GA	102	1,000	±5	30	0.252	1.0	1.2	0.74	0.60	
GC	152	1,500	±5	30	0.252	0.83	1.8	0.60	0.45	
GE	222	2,200	±5	20	0.252	0.70	2.2	0.51	0.40	
GG	332	3,300	±5	20	0.252	0.60	3.4	0.41	0.33	
GJ	472	4,700	±5	20	0.252	0.43	4.7	0.39	0.28	
GL	682	6,800	±5	20	0.252	0.38	5.6	0.31	0.25	
HA	103	10,000	±5	70	0.0796	0.30	10	0.22	0.19	

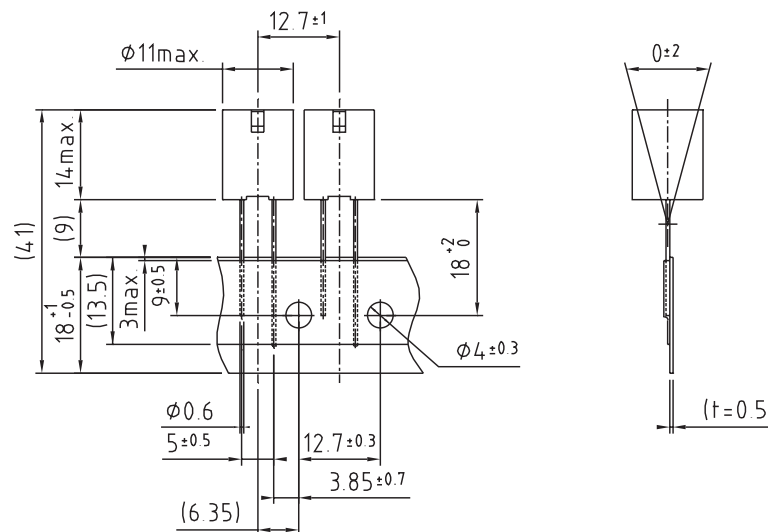
* Rated current (L value) : A current value obtained when the inductance value has dropped by 10% of the initial value in DC superimposition characteristic.
 Rated current (temperature) : A current value where the temperature rise becomes 20°C when flowing a current at normal temperature.

DIMENSIONS

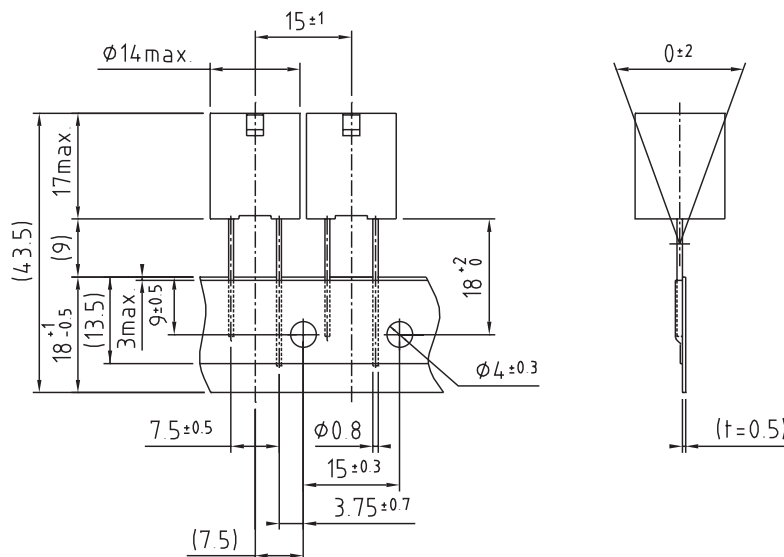
C8-FR1 Series



C10-FR1 Series



C13-FR Series



Unit : mm