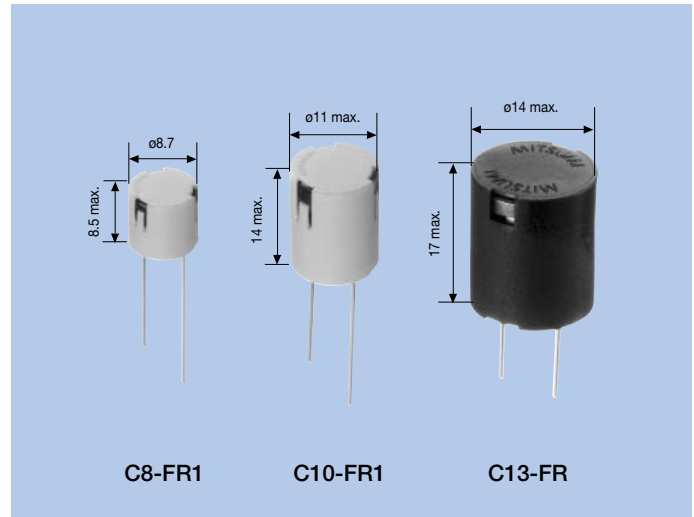


# Power Inductors CFR Series

## OUTLINE

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



## FEATURES

1. DC current available to maximum 9.0A (C13-FR).
2. Possible to indicate of winding start.
3. Radial taping.

## APPLICATIONS

For power supplies of TVs VCRs, display monitors, computers and other units.

For power supplies of air conditioners, rice cooker, refrigerators, washing machines, cleaners, electric boilers & warmers and other equipment.

## 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	1,000
C10-FR1 Series	3.3μH~150mH	0.048~9.00 (L=3.3μH)	0.019~300 (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			Self Resonant Frequency	DC Resistance	Rated Current *	
		(μH)	Tolerance (%)	Measured Frequency (kHz)			(MHz) min.	(Ω) max.
					L	Temperature		
DE	2R2	2.2	±20	1kHz	40	0.018	5.0	2.9
DG	3R3	3.3	±15	1kHz	34	0.021	4.5	2.7
DH	3R9	3.9	±15	1kHz	30	0.028	4.1	2.6
DJ	4R7	4.7	±15	1kHz	27	0.030	3.7	2.5
DK	5R6	5.6	±15	1kHz	23	0.032	3.4	2.4
DL	6R8	6.8	±15	1kHz	21	0.035	3.1	2.3
DM	8R2	8.2	±15	1kHz	19	0.038	2.6	2.1
EA	100	10	±10	1kHz	17	0.042	2.5	2.0
EB	120	12	±10	1kHz	15	0.057	2.3	1.9
EC	150	15	±10	1kHz	13	0.066	2.0	1.8
ED	180	18	±10	1kHz	12	0.071	1.8	1.6
EE	220	22	±10	1kHz	10	0.087	1.6	1.3
EF	270	27	±10	1kHz	9.0	0.14	1.4	1.2
EG	330	33	±10	1kHz	8.0	0.15	1.3	1.2
EH	390	39	±10	1kHz	7.1	0.17	1.2	1.1
EJ	470	47	±10	1kHz	6.5	0.18	1.1	1.0
EK	560	56	±10	1kHz	5.9	0.21	1.0	0.96
EL	680	68	±10	1kHz	5.4	0.24	0.91	0.90
EM	820	82	±10	1kHz	4.8	0.28	0.83	0.80
FA	101	100	±10	1kHz	4.4	0.32	0.75	0.72
FB	121	120	±10	1kHz	4.0	0.36	0.68	0.63
FC	151	150	±10	1kHz	3.6	0.44	0.61	0.57
FD	181	180	±10	1kHz	3.2	0.66	0.56	0.53
FE	221	220	±10	1kHz	2.9	0.73	0.50	0.50
FF	271	270	±10	1kHz	2.6	0.85	0.45	0.45
FG	331	330	±10	1kHz	2.4	1.1	0.41	0.41
FH	391	390	±10	1kHz	2.1	1.3	0.37	0.38
FJ	471	470	±10	1kHz	2.0	1.8	0.34	0.36
FK	561	560	±10	1kHz	1.8	1.9	0.31	0.33
FL	681	680	±10	1kHz	1.6	2.2	0.28	0.29
FM	821	820	±10	1kHz	1.4	2.9	0.25	0.26
GA	102	1,000	±10	1kHz	1.3	3.3	0.23	0.24
GB	122	1,200	±10	1kHz	1.2	4.4	0.21	0.22
GC	152	1,500	±10	1kHz	1.1	5.1	0.18	0.19
GD	182	1,800	±10	1kHz	1.0	5.8	0.16	0.16
GE	222	2,200	±10	1kHz	0.88	8.0	0.14	0.15
GF	272	2,700	±10	1kHz	0.79	9.5	0.14	0.13
GG	332	3,300	±10	1kHz	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			Self Resonant Frequency	DC Resistance	Rated Current *			
		( $\mu$ H)	Tolerance (%)	Measured Frequency (MHz)			(MHz) min.	( $\Omega$ ) max.	(A)	
									L	Temperature
DG	3R3	3.3	$\pm 20$	7.96	46	0.019	9.0	4.2		
DH	3R9	3.9	$\pm 20$	7.96	40	0.022	8.0	4.1		
DJ	4R7	4.7	$\pm 20$	7.96	38	0.024	7.1	4.0		
DK	5R6	5.6	$\pm 20$	7.96	34	0.025	6.7	3.8		
DL	6R8	6.8	$\pm 20$	7.96	30	0.028	6.3	3.4		
DM	8R2	8.2	$\pm 20$	7.96	24	0.031	5.5	3.3		
EA	100	10	$\pm 10$	2.52	19	0.034	4.7	3.2		
EB	120	12	$\pm 10$	2.52	16	0.038	4.4	2.8		
EC	150	15	$\pm 10$	2.52	12	0.042	4.3	2.6		
ED	180	18	$\pm 10$	2.52	9.2	0.046	3.9	2.4		
EE	220	22	$\pm 10$	2.52	8.6	0.061	3.4	2.1		
EF	270	27	$\pm 10$	2.52	7.1	0.069	3.0	2.0		
EG	330	33	$\pm 10$	2.52	6.8	0.078	2.7	1.9		
EH	390	39	$\pm 10$	2.52	6.7	0.085	2.5	1.8		
EJ	470	47	$\pm 10$	2.52	6.2	0.093	2.3	1.7		
EK	560	56	$\pm 10$	2.52	5.2	0.10	2.1	1.6		
EL	680	68	$\pm 10$	2.52	4.6	0.12	2.0	1.5		
EM	820	82	$\pm 10$	2.52	4.2	0.13	1.8	1.4		
FA	101	100	$\pm 10$	0.796	3.8	0.18	1.5	1.2		
FB	121	120	$\pm 10$	0.796	3.2	0.25	1.4	1.0		
FC	151	150	$\pm 10$	0.796	2.9	0.29	1.3	0.95		
FD	181	180	$\pm 10$	0.796	2.6	0.40	1.2	0.80		
FE	221	220	$\pm 10$	0.796	2.3	0.44	1.1	0.75		
FF	271	270	$\pm 10$	0.796	2.1	0.50	1.0	0.70		
FG	331	330	$\pm 10$	0.796	2.0	0.56	0.91	0.68		
FH	391	390	$\pm 10$	0.796	1.8	0.62	0.82	0.63		
FJ	471	470	$\pm 10$	0.796	1.7	0.84	0.77	0.57		
FK	561	560	$\pm 10$	0.796	1.5	0.93	0.70	0.52		
FL	681	680	$\pm 10$	0.796	1.4	1.0	0.66	0.48		
FM	821	820	$\pm 10$	0.796	1.3	1.4	0.52	0.42		
GA	102	1,000	$\pm 5$	0.252	1.2	1.8	0.49	0.41		
GB	122	1,200	$\pm 5$	0.252	0.87	1.8	0.49	0.41		
GC	152	1,500	$\pm 5$	0.252	0.83	2.7	0.40	0.30		
GD	182	1,800	$\pm 5$	0.252	0.75	3.0	0.37	0.29		
GE	222	2,200	$\pm 5$	0.252	0.70	3.9	0.33	0.25		
GF	272	2,700	$\pm 5$	0.252	0.67	4.3	0.32	0.24		
GG	332	3,300	$\pm 5$	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			Self Resonant Frequency	DC Resistance	Rated Current *	
		(μH)	Tolerance (%)	Measured Frequency (MHz)			(MHz) min.	(Ω) max.
					L	Temperature		
GH	392	3,900	±5	0.252	540	6.4	0.28	0.20
GJ	472	4,700	±5	0.252	490	7.1	0.25	0.19
GK	562	5,600	±5	0.252	410	9.0	0.22	0.17
GL	682	6,800	±5	0.252	380	10	0.21	0.16
GM	822	8,200	±5	0.252	360	12	0.19	0.15
HA	103	10,000	±5	0.001	290	19	0.15	0.12
HB	123	12,000	±5	0.001	270	21	0.14	0.11
HC	153	15,000	±5	0.001	240	34	0.13	0.090
HD	183	18,000	±5	0.001	210	38	0.12	0.081
HE	223	22,000	±5	0.001	200	43	0.11	0.075
HF	273	27,000	±5	0.001	150	67	0.098	0.060
HG	333	33,000	±5	0.001	140	76	0.094	0.056
HH	393	39,000	±5	0.001	130	84	0.084	0.053
HJ	473	47,000	±5	0.001	120	96	0.075	0.050
HK	563	56,000	±5	0.001	100	170	0.072	0.036
HL	683	68,000	±5	0.001	95	200	0.071	0.035
HM	823	82,000	±5	0.001	88	210	0.063	0.033
JA	104	100,000	±5	0.001	85	240	0.058	0.031
JB	124	120,000	±5	0.001	70	260	0.053	0.030
JC	154	150,000	±5	0.001	69	300	0.048	0.028

\* 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 (C13-FR Series)**

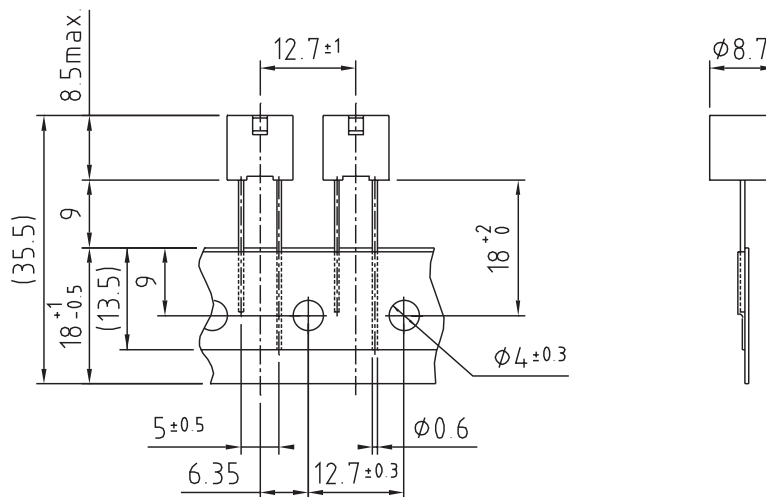
Distinctive Name	Marking	Inductance			Self Resonant Frequency	DC Resistance	Rated Current *	
		( $\mu$ H)	Tolerance (%)	Measured Frequency (MHz)			(MHz) min.	( $\Omega$ ) max.
					L	Temperature		
EA	100	10	$\pm 10$	2.52	19	0.023	7.6	4.5
EC	150	15	$\pm 10$	2.52	12	0.028	6.2	4.0
EE	220	22	$\pm 10$	2.52	7.6	0.035	4.9	3.4
EG	330	33	$\pm 10$	2.52	6.9	0.043	4.1	3.2
EJ	470	47	$\pm 10$	2.52	5.6	0.052	3.5	2.8
EL	680	68	$\pm 10$	2.52	4.4	0.070	3.0	2.4
FA	101	100	$\pm 10$	0.796	3.3	0.12	2.2	2.0
FC	151	150	$\pm 10$	0.796	2.6	0.19	1.9	1.5
FE	221	220	$\pm 10$	0.796	2.2	0.23	1.5	1.3
FG	331	330	$\pm 10$	0.796	1.8	0.35	1.3	1.1
FJ	471	470	$\pm 10$	0.796	1.5	0.43	1.1	0.90
FL	681	680	$\pm 10$	0.796	1.2	0.61	0.95	0.80
GA	102	1,000	$\pm 5$	0.252	1.0	1.2	0.74	0.60
GC	152	1,500	$\pm 5$	0.252	0.83	1.8	0.60	0.45
GE	222	2,200	$\pm 5$	0.252	0.70	2.2	0.51	0.40
GG	332	3,300	$\pm 5$	0.252	0.60	3.4	0.41	0.33
GJ	472	4,700	$\pm 5$	0.252	0.43	4.7	0.39	0.28
GL	682	6,800	$\pm 5$	0.252	0.38	5.6	0.31	0.25
HA	103	10,000	$\pm 5$	0.001	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.

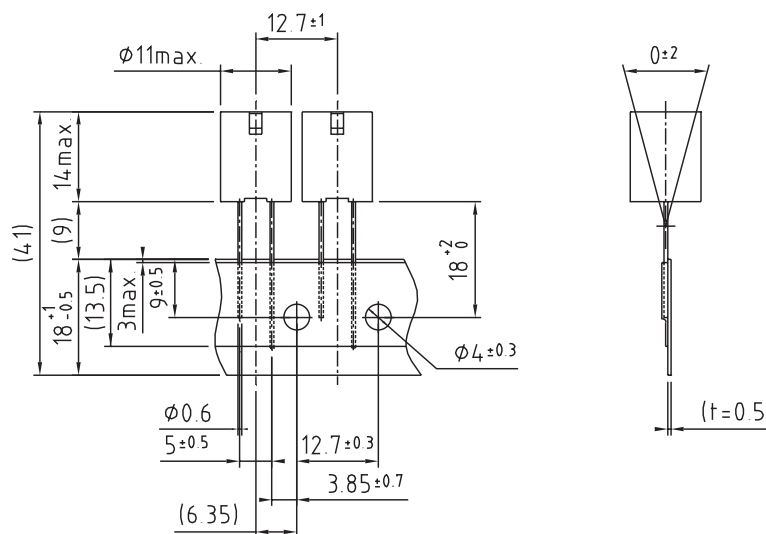
Rated current (temperature) : A current value where the temperature rise becomes 20°C when flowing a current at normal temperature.

**DIMENSIONS**

**C8-FR1 Series**



**C10-FR1 Series**



**C13-FR Series**

