



## FS SERIES

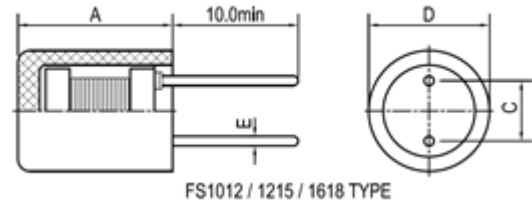
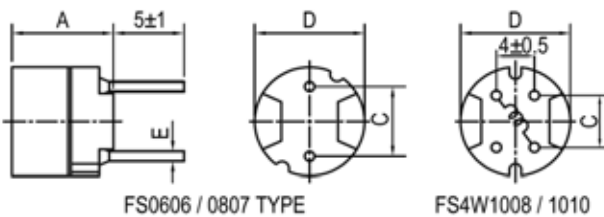
FERRITE SHIELDED.

### Applications:

- Video cameras
- Portable VCRs
- Audio equipments
- Other circuits of consideration against radiation



### Shape and Dimensions (Dimensions are in mm) :



Item	A Max.	D Max.	C	E typ.
FS0606	6.5	6.5	4.0±0.5	0.55
FS0807	7.5	8.3	5.0±0.5	0.65
FS4W1008	8.5	10.5	5.0±0.5	0.65
FS4W1010	10.5	10.5	5.0±0.5	0.65
FS1012	13.5	11.0	5.0±1.0	0.80
FS1215	17.0	13.4	5.0±1.0	0.80
FS1618	19.2	17.0	7.5±1.0	0.80
FSB1014	14.0	11.0	5.0±0.5	0.80

### Features :

- No inductive interference
- FS0606/0807/1008/1010/1215/1618 are high power inductors
- FS1012/FSB1014 are excellent Q frequency characteristics and high self-resonant frequency.
- S0606/0807/1012 Taped for auto-insertion.
- RoHS compliant.

### Characteristics :

- Rated Current : It is either the inductance is 10% lower is than its initial value in DC. saturation characteristics or temperature rise becomes  $\Delta T=20^{\circ}\text{C}$  ( $T_a=20$ )  
Whichever lower.
- Operating temperature:  $-20^{\circ}\text{C}$  to  $85^{\circ}\text{C}$ .

### Product Identification:

**FS 1012 - 223 K - TF**

(1) (2) (3) (4) (5)

- (1) Type : Ferrite Shielded.
- (2) Style : core size, OD=10,L=12.
- (3) Inductance : **223** for 22mH .
- (4) Inductance tolerance :  
**K**:  $\pm 10\%$ ; **L**:15%; **M**:  $\pm 20\%$ ;
- (5) Packing : TF: Tape; No code: Bulk .

### Test equipment :

- L: LCR meter.
- DCR: Milli-ohm meter.
- Electrical specifications at  $25^{\circ}\text{C}$ .



● **FS0606 / 0807 / 4W1008 / 4W1010 series**

Part No.	L (uH)	Test Freq.	DCR (Ω) Max.				Rated Current (mA) Max.			
			FS0606	FS0807	FS4W 1008	FS4W 1010	FS0606	FS0807	FS4W 1008	FS4W 1010
100L	10	2.52MHz			0.05	0.023			2800	3510
120L	12	2.52MHz			0.06	0.024			2500	3240
150L	15	2.52MHz			0.07	0.036			2300	2880
180L	18	2.52MHz			0.08	0.039			2100	2610
220L	22	2.52MHz	0.13	0.08	0.09	0.042	960	1600	2000	2340
270L	27	2.52MHz	0.18	0.10	0.10	0.045	870	1400	1760	2160
330L	33	2.52MHz	0.21	0.14	0.11	0.057	780	1300	1600	1890
390L	39	2.52MHz	0.26	0.15	0.12	0.076	720	1200	1380	1800
470L	47	2.52MHz	0.29	0.17	0.14	0.100	660	1100	1280	1620
560K	56	2.52MHz	0.33	0.19	0.15	0.110	600	990	1200	1440
680K	68	2.52MHz	0.36	0.21	0.16	0.150	550	890	1000	1350
820K	82	2.52MHz	0.39	0.27	0.18	0.160	500	810	960	1260
101K	100	1KHz	0.54	0.32	0.20	0.190	450	740	920	1080
121K	120	1KHz	0.62	0.36	0.24	0.210	410	670	800	990
151K	150	1KHz	0.72	0.51	0.35	0.230	370	600	730	900
181K	180	1KHz	0.88	0.57	0.40	0.260	340	550	640	820
221K	220	1KHz	0.99	0.76	0.54	0.290	300	500	610	740
271K	270	1KHz	1.52	0.86	0.76	0.360	270	450	560	670
331K	330	1KHz	1.69	0.97	0.86	0.510	250	410	500	610
391K	390	1KHz	1.85	1.28	0.93	0.690	230	370	440	550
471K	470	1KHz	2.85	1.44	1.23	0.980	210	340	410	510
561K	560	1KHz	3.21	1.61	1.34	1.100	190	310	380	460
681K	680	1KHz	3.60	2.07	1.53	1.200	170	280	340	420
821K	820	1KHz	4.87	2.33	2.10	1.300	160	260	320	380
102K	1000	1KHz	5.65	2.72	2.30	1.500	140	230	280	350
122K	1200	1KHz		3.98				210		
152K	1500	1KHz		4.50				190		
182K	1800	1KHz		6.81				170		
222K	2200	1KHz		7.56				160		
272K	2700	1KHz		8.54				140		
332K	3300	1KHz		9.74				130		
392K	3900	1KHz		12.9				120		
472K	4700	1KHz		14.7				110		
562K	5600	1KHz		20.4				99		
682K	6800	1KHz		23.0				89		
822K	8200	1KHz		30.6				81		
103K	10000	1KHz		35.0				74		


**● FS1012 series**

Part No.	L (mH) @1KHz	Q Min.	Q Test Freq.	DCR (Ω) Max.	Rated Current (mA) Max.
FS1012 -122K	1.2	50	252 kHz	1.2	200
FS1012 -152K	1.5	50	252 kHz	1.5	200
FS1012 -182K	1.8	50	252 kHz	1.6	200
FS1012 -222K	2.2	50	252 kHz	1.8	200
FS1012 -272K	2.7	40	252 kHz	1.9	200
FS1012 -332K	3.3	40	252 kHz	2.3	200
FS1012 -392K	3.9	40	252 kHz	2.5	200
FS1012 -472K	4.7	40	252 kHz	3.7	140
FS1012 -502K	5.0	40	252 kHz	3.8	140
FS1012 -562K	5.6	40	252 kHz	4.0	140
FS1012 -682K	6.8	40	252 kHz	4.2	140
FS1012 -822K	8.2	40	252 kHz	5.3	140
FS1012 -103K	10	100	79.6 kHz	7.3	100
FS1012 -123K	12	100	79.6 kHz	8.3	100
FS1012 -153K	15	100	79.6 kHz	11.0	90
FS1012 -183K	18	100	79.6 kHz	13.6	75
FS1012 -223K	22	100	79.6 kHz	15.4	75
FS1012 -273K	27	100	79.6 kHz	17.9	75
FS1012 -333K	33	100	79.6 kHz	23.3	60
FS1012 -393K	39	100	79.6 kHz	25.9	60
FS1012 -473K	47	80	79.6 kHz	30.4	60
FS1012 -503K	50	80	79.6 kHz	37.8	50
FS1012 -563K	56	80	79.6 kHz	39.1	50
FS1012 -683K	68	50	79.6 kHz	40	50
FS1012 -823K	82	50	79.6 kHz	47	40
FS1012 -104K	100	120	25.2 kHz	50	40
FS1012 -124K	120	100	25.2 kHz	91	30
FS1012 -154K	150	90	25.2 kHz	140	20
FS1012 -184K	180	90	25.2 kHz	164	20
FS1012 -224K	220	90	25.2 kHz	182	20
FS1012 -274K	270	90	25.2 kHz	200	20
FS1012 -334K	330	80	25.2 kHz	275	15
FS1012 -394K	390	80	25.2 kHz	300	15
FS1012 -474K	470	80	25.2 kHz	345	15
FS1012 -564K	560	60	25.2 kHz	520	8.4
FS1012 -684K	680	60	25.2 kHz	590	8.4
FS1012 -824K	820	50	25.2 kHz	675	8.4
FS1012 -105K	1000	50	25.2 kHz	770	8.4
FS1012 -125K	1200	50	25.2 kHz	845	8.4



● **FS1215 / 1618 series**

Part No.	L (uH) @1KHz	DCR (Ω) Max.		I sat (A) Max. <sup>1</sup>		I rms (A) Max. <sup>2</sup>	
		FS1215	FS1618	FS1215	FS1618	FS1215	FS1618
100L	10	0.015	0.020	5.0	7.0	3.61	5.20
150L	15	0.017	0.022	4.0	6.0	3.16	4.90
180L	18	0.020	0.025	3.7	5.2	2.81	4.70
220L	22	0.021	0.028	3.3	4.9	2.44	4.50
270L	27	0.023	0.032	3.0	4.3	2.12	4.30
330L	33	0.024	0.033	2.7	3.9	1.80	4.10
390L	39	0.027	0.036	2.5	3.7	1.64	3.90
470L	47	0.032	0.038	2.3	3.4	1.57	3.60
560L	56	0.045	0.042	2.1	3.1	1.39	3.50
680L	68	0.060	0.046	1.9	2.9	1.26	3.40
820L	82	0.070	0.049	1.7	2.8	1.18	3.10
101L	100	0.09	0.053	1.5	2.5	1.14	2.90
151L	150	0.11	0.077	1.0	2.0	0.82	2.30
181L	180	0.12	0.10	0.90	1.8	0.73	2.10
221L	220	0.14	0.14	0.82	1.6	0.61	1.70
271L	270	0.16	0.20	0.74	1.4	0.54	1.50
331L	330	0.17	0.27	0.68	1.3	0.52	1.40
391L	390	0.32	0.41	0.62	1.2	0.48	1.10
471L	470	0.35	0.46	0.56	1.1	0.44	1.00
561L	560	0.39	0.51	0.52	1.0	0.40	0.98
681L	680	0.44	0.56	0.46	0.90	0.38	0.94
821L	820	0.56	0.63	0.42	0.83	0.28	0.90
102L	1000	0.68	0.69	0.38	0.75	0.27	0.86
122L	1200	0.78		0.35		0.26	
152L	1500	1.10		0.31		0.23	
182L	1800	1.20		0.28		0.21	
222L	2200	1.30		0.25		0.18	

NOTE :

- 1.Saturation Current (Isat): The current when the inductance becomes 10% lower than its initial value.(Ta=20°C)
- 2.Temperature Rise Current(I rms): The current when temperature of coil increase up to max.ΔT=20°C.(Ta=20°C)



● **FSB1014 series**

Part No.	L (mH) @1KHz	Q Min.	Q Test Freq.	DCR (Ω) Max.	Rated Current (mA) Max.
FSB1014 - 102K	1.0	15	252 KHz	2.0	270
FSB1014 - 122K	1.2	15	252 KHz	2.3	250
FSB1014 - 152K	1.5	15	252 KHz	2.7	220
FSB1014 - 182K	1.8	15	252 KHz	3.0	220
FSB1014 - 222K	2.2	15	252 KHz	3.8	200
FSB1014 - 272K	2.7	15	252 KHz	4.5	180
FSB1014 - 332K	3.3	20	252 KHz	6.0	160
FSB1014 - 392K	3.9	20	252 KHz	7.8	120
FSB1014 - 472K	4.7	20	252 KHz	10.5	120
FSB1014 - 562K	5.6	20	252 KHz	11.0	100
FSB1014 - 682K	6.8	20	252 KHz	11.8	100
FSB1014 - 822K	8.2	20	252 KHz	13.2	100
FSB1014 - 103K	10	60	79.6 KHz	17.6	90
FSB1014 - 123K	12	60	79.6 KHz	22.5	75
FSB1014 - 153K	15	60	79.6 KHz	25	75
FSB1014 - 183K	18	60	79.6 KHz	32	60
FSB1014 - 223K	22	60	79.6 KHz	36	60
FSB1014 - 273K	27	60	79.6 KHz	46	50
FSB1014 - 333K	33	60	79.6 KHz	54	50
FSB1014 - 393K	39	45	79.6 KHz	72	40
FSB1014 - 473K	47	45	79.6 KHz	76	40
FSB1014 - 563K	56	45	79.6 KHz	89	40
FSB1014 - 683K	68	30	79.6 KHz	123	30
FSB1014 - 823K	82	30	79.6 KHz	135	30
FSB1014 - 104K	100	45	25.2 KHz	205	20
FSB1014 - 124K	120	45	25.2 KHz	228	20

\* Due to the limited space, the catalogue shows the typical specifications only. For more specific details ( characteristics graph, reliability, and others), kindly invite you to access 3L official website [www.3lcoil.com](http://www.3lcoil.com) for better known.

**Power Inductor-DIP Type**