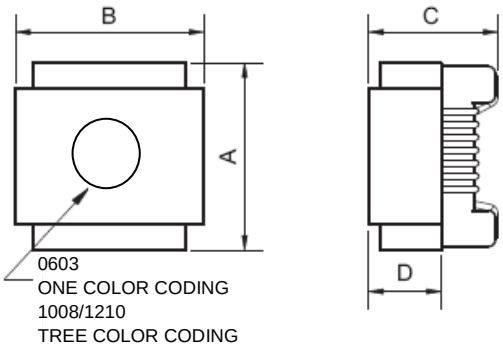
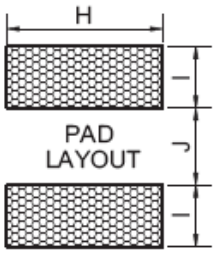
MINIATURE SMD CHIP INDUCTORS

SMDFSR 0603SDP/1008SDP/1210SDP TYPE

Shape and Size :(Dimensions are in mm)





ITEM	A max	B max	C max	D	E	H	I	J
SMDFSR 0603SDP	1.80	1.20	1.10	0.45	0.33	1.02	0.64	0.64
SMDFSR 1008SDP	2.90	2.54	2.00	1.30	0.50	2.54	1.02	1.27
SMDFSR 1210SDP	3.60	2.90	2.50	1.10	0.50	2.70	1.20	2.00

Features :

· Miniature SMD wire wound chip inductors have been designed especially for the need of today's small-sized applications

· The SMDFSR series is recommended for Power Line application

· Resin-coated surface enables excellent mounting

· Their ferrite core inductors have lower DCR and higher curent ratings. The inductance values from 0.047 to 1000uH

.

Ordering Information :

S M D F S R 1 0 0 8 SDP 4 7 N K

(1) (2) (3) (4) (5) (6) (7) (8)

(1)Type : **S**urface **M**ount **D**evices .

(2)Material : **F** : Ferrite Core

(3)Terminal **S** : with Silver wraparound .

(4)Packaging **R** : Tape and Reel .

(5)Type 1008 : **L**=0.1 Inch **W**=0.08 Inch

(6)Design Code . SDP : For Power Line

(7)Inductance : **47**N for **47** nH .

(8)Inductance tolerance :

K : ±10% ; **M** : ±20% .

Inductance and rated current ranges :

· SMDFSR0603SDP	0.047~10uH	1.8~0.40A
· SMDFSR1008SDP	0.1~330uH	3~0.11A
· SMDFSR1210SDP	0.33~1000uH	3.4A~0.095A

Characteristics :

· Isat: Idc obtained when Inductance drop 35% from its value without current.

· Irms for 40℃ rise from 25℃ ambient.

· Operating temp. : -25℃ to 85 ℃

Test equipments and test setup :

L & Q & SRF : Agilent 4291B RF Impedance Analyzer with Agilent 16193A test fixture.

DCR : Milli-ohm meter .

· Electrical specifications at 25℃.

Applications :

· XDSL/CATV/Wireless Lan / Cable Modem

For single line and other small-sized general electronic applications.

MINIATURE SMD CHIP INDUCTORS

SMDFSR 0603SDP

Part No.	L uH	Tole.	Q Min.	Test Freq. (MHz)	SRF (MHz) Min.	DCR (OHM) Max.	Isat (mA) Max.	Irms (mA) Typ.	Color Code
SMDFSR0603SDP -47N☐	0.047	K,M	12	7.9	2000	0.075	1800	1600	White
SMDFSR0603SDP -51N☐	0.051	K,M	12	7.9	1500	0.075	1800	1500	Violet
SMDFSR0603SDP -68N☐	0.068	K,M	10	7.9	1500	0.12	1800	1400	Gray
SMDFSR0603SDP -72N☐	0.072	K,M	12	7.9	1500	0.12	1800	1400	Brown
SMDFSR0603SDP -R10☐	0.10	K,M	12	7.9	1150	0.13	1700	1300	Black
SMDFSR0603SDP -R12☐	0.12	K,M	12	7.9	1100	0.15	1700	1300	Orange
SMDFSR0603SDP -R15☐	0.15	K,M	15	7.9	1050	0.15	1600	1200	Brown
SMDFSR0603SDP -R18☐	0.18	K,M	15	7.9	950	0.15	1500	1100	Green
SMDFSR0603SDP -R22☐	0.22	K,M	15	7.9	900	0.30	1200	940	Red
SMDFSR0603SDP -R24☐	0.24	K,M	15	7.9	850	0.16	1460	1000	Green
SMDFSR0603SDP -R27☐	0.27	K,M	15	7.9	835	0.30	1460	950	Yellow
SMDFSR0603SDP -R33☐	0.33	K,M	15	7.9	725	0.40	1420	940	Orange
SMDFSR0603SDP -R39☐	0.39	K,M	15	7.9	680	0.41	1400	860	Blue
SMDFSR0603SDP -R47☐	0.47	K,M	15	7.9	640	0.43	1400	820	Black
SMDFSR0603SDP -R56☐	0.56	K,M	15	7.9	630	0.44	1400	770	Brown
SMDFSR0603SDP -R65☐	0.65	K,M	15	7.9	510	0.52	1340	760	Blue
SMDFSR0603SDP -R68☐	0.68	K,M	15	7.9	510	0.52	1340	730	Red
SMDFSR0603SDP -R78☐	0.78	K,M	15	7.9	465	0.63	1300	730	Orange
SMDFSR0603SDP -R82☐	0.82	K,M	15	7.9	460	0.69	1200	660	Yellow
SMDFSR0603SDP -1R0☐	1.00	K,M	15	7.9	320	0.81	1100	630	Green
SMDFSR0603SDP -1R2☐	1.20	K,M	15	7.9	270	0.87	1000	540	Blue
SMDFSR0603SDP -1R5☐	1.50	K,M	15	7.9	230	0.96	920	560	Violet
SMDFSR0603SDP -1R8☐	1.80	K,M	15	7.9	210	1.10	900	500	Gray
SMDFSR0603SDP -2R2☐	2.20	K,M	15	7.9	115	1.20	740	500	White
SMDFSR0603SDP -2R7☐	2.70	K,M	15	7.9	100	1.38	700	460	Black
SMDFSR0603SDP -3R0☐	3.00	K,M	15	7.9	90	1.45	680	430	Black
SMDFSR0603SDP -3R3☐	3.30	K,M	15	7.9	84	1.50	680	420	Brown
SMDFSR0603SDP -3R9☐	3.90	K,M	15	7.9	75	1.50	600	400	Red
SMDFSR0603SDP -4R7☐	4.70	K,M	15	7.9	67	2.10	580	350	Orange
SMDFSR0603SDP -5R6☐	5.60	K,M	15	7.9	55	2.37	540	340	Yellow
SMDFSR0603SDP -6R8☐	6.80	K,M	15	7.9	48	3.10	500	330	Green
SMDFSR0603SDP -7R8☐	7.80	K,M	15	7.9	40	3.35	460	320	Blue
SMDFSR0603SDP -8R2☐	8.20	K,M	15	7.9	38	3.50	440	300	Violet
SMDFSR0603SDP -100☐	10.0	K,M	15	7.9	32	4.46	400	250	Gray

MINIATURE SMD CHIP INDUCTORS

SMDFSR 1008SDP

Part No.	L uH	Tole.	Q ref.	Test Freq. (MHz)	SRF (MHz) Min.	DCR (OHM) Max.	Isat (mA) Max.	Irms (mA) Typ.	Color Code 1st	2nd	3rd
SMDFSR1008SDP -R10□	0.10	K,M	35	25	1500	0.05	3000	2700	Brown	Black	Brown
SMDFSR1008SDP -R22□	0.22	K,M	35	25	800	0.15	2600	2400	Red	Red	Brown
SMDFSR1008SDP -R47□	0.47	K,M	35	25	460	0.20	2400	1100	Yellow	Violet	Brown
SMDFSR1008SDP -R68□	0.68	K,M	35	25	400	0.30	2200	1100	Blue	Gray	Brown
SMDFSR1008SDP -R82□	0.82	K,M	35	25	360	0.35	1800	1000	Gray	Red	Brown
SMDFSR1008SDP -1R0□	1.00	K,M	32	7.9	340	0.34	2100	900	Brown	Black	Red
SMDFSR1008SDP -1R2□	1.20	K,M	25	7.9	300	0.25	1900	860	Brown	Red	Red
SMDFSR1008SDP -1R5□	1.50	K,M	32	7.9	230	0.42	1500	740	Brown	Green	Red
SMDFSR1008SDP -1R8□	1.80	K,M	27	7.9	180	0.45	1500	720	Brown	Gray	Red
SMDFSR1008SDP -2R2□	2.20	K,M	27	7.9	140	0.50	1200	700	Red	Red	Red
SMDFSR1008SDP -2R7□	2.70	K,M	27	7.9	130	0.55	1300	560	Red	Violet	Red
SMDFSR1008SDP -3R3□	3.30	K,M	27	7.9	125	0.60	1300	540	Orange	Orange	Red
SMDFSR1008SDP -3R9□	3.90	K,M	27	7.9	100	0.80	1200	480	Orange	White	Red
SMDFSR1008SDP -4R7□	4.70	K,M	30	7.9	90	0.90	1100	400	Yellow	Violet	Red
SMDFSR1008SDP -5R6□	5.60	K,M	27	7.9	60	1.00	1000	400	Green	Blue	Red
SMDFSR1008SDP -6R8□	6.80	K,M	27	7.9	60	1.05	950	420	Blue	Gray	Red
SMDFSR1008SDP -8R2□	8.20	K,M	25	7.9	55	1.20	850	380	Gray	Red	Red
SMDFSR1008SDP -100□	10.0	K,M	23	2.5	55	1.55	800	240	Brown	Black	Orange
SMDFSR1008SDP -120□	12.0	K,M	23	2.5	36	2.10	630	220	Brown	Red	Orange
SMDFSR1008SDP -150□	15.0	K,M	23	2.5	36	2.38	650	200	Brown	Green	Orange
SMDFSR1008SDP -180□	18.0	K,M	23	2.5	32	2.50	550	180	Brown	Gray	Orange
SMDFSR1008SDP -220□	22.0	K,M	23	2.5	29	2.92	550	180	Red	Red	Orange
SMDFSR1008SDP -270□	27.0	K,M	23	2.5	22	3.70	460	180	Red	Violet	Orange
SMDFSR1008SDP -330□	33.0	K,M	23	2.5	21	4.10	450	140	Orange	Orange	Orange
SMDFSR1008SDP -390□	39.0	K,M	18	2.5	15	5.50	350	120	Orange	White	Orange
SMDFSR1008SDP -470□	47.0	K,M	23	2.5	17	7.80	350	100	Yellow	Violet	Orange
SMDFSR1008SDP -680□	68.0	K,M	20	2.5	9	11.5	260	100	Blue	Gray	Orange
SMDFSR1008SDP -101□	100	K,M	13	1	4	13.2	200	100	Brown	Black	Yellow
SMDFSR1008SDP -221□	220	K,M	13	1	3	26.5	140	60	Red	Red	Yellow
SMDFSR1008SDP -331□	330	K,M	13	1	2	32.5	110	50	Orange	Orange	Yellow

MINIATURE SMD CHIP INDUCTORS

SMDFSR 1210SDP

Part No.	L uH	Tole.	Q Min.	Test Freq. (MHz)	SRF (MHz) Min.	DCR (OHM) Max.	Isat (mA) Max.	Irms (mA) Typ.	Color Code 1st	2nd	3rd
SMDFSR1210SDP -R33☐	0.33	K,M	40	25	500	0.090	3400	2600	Orange	Orange	Brown
SMDFSR1210SDP -R39☐	0.39	K,M	40	25	500	0.090	3100	2200	Orange	White	Brown
SMDFSR1210SDP -R47☐	0.47	K,M	40	25	500	0.090	3200	2400	Yellow	Violet	Brown
SMDFSR1210SDP -R56☐	**0.56**	K,M	40	25	500	0.100	2900	2300	Green	Blue	Brown
SMDFSR1210SDP -R91☐	0.91	K,M	45	25	410	0.165	2100	1600	White	Brown	Brown
SMDFSR1210SDP -1R0☐	1.00	K,M	35	7.9	340	0.125	2400	1750	Brown	Black	Red
SMDFSR1210SDP -1R2☐	1.20	K,M	35	7.9	280	0.135	2400	1650	Brown	Red	Red
SMDFSR1210SDP -1R5☐	1.50	K,M	30	7.9	160	0.145	2100	1700	Brown	Green	Red
SMDFSR1210SDP -1R8☐	1.80	K,M	30	7.9	120	0.160	2100	1450	Brown	Gray	Red
SMDFSR1210SDP -2R2☐	2.20	K,M	30	7.9	100	0.170	1800	1450	Red	Red	Red
SMDFSR1210SDP -3R3☐	3.30	K,M	30	7.9	70	0.210	1600	1300	Orange	Orange	Red
SMDFSR1210SDP -4R7☐	4.70	K,M	28	7.9	55	0.300	1300	1100	Yellow	Violet	Red
SMDFSR1210SDP -6R8☐	6.80	K,M	28	7.9	45	0.370	1100	1000	Blue	Gray	Red
SMDFSR1210SDP -100☐	10.0	K,M	22	2.5	47	0.500	990	800	Brown	Black	Orange
SMDFSR1210SDP -220☐	22.0	K,M	22	2.5	25	1.100	640	550	Red	Red	Orange
SMDFSR1210SDP -470☐	47.0	K,M	20	2.5	12	1.880	470	410	Yellow	Yiolet	Orange
SMDFSR1210SDP -680☐	68.0	K,M	22	2.5	10	3.000	380	330	Blue	Gray	Orange
SMDFSR1210SDP -101☐	100	K,M	15	1.0	8	4.862	310	260	Brown	Black	Yellow
SMDFSR1210SDP -151☐	150	K,M	13	1.0	7	6.102	260	230	Brown	Green	Yellow
SMDFSR1210SDP -181☐	180	K,M	13	1.0	3	7.100	250	210	Brown	Gray	Yellow
SMDFSR1210SDP -221☐	220	K,M	13	1.0	3	7.650	220	190	Red	Red	Yellow
SMDFSR1210SDP -331☐	330	K,M	13	1.0	3	12.62	170	160	Orange	Orange	Yellow
SMDFSR1210SDP -471☐	470	K,M	13	1.0	3	25.00	135	130	Yellow	Yiolet	Yellow
SMDFSR1210SDP -821☐	820	K,M	10	1.0	2	42.00	100	95	Gray	Red	Yellow
SMDFSR1210SDP -1000☐	1000	K,M	10	1.0	2	46.00	95	95	Brown	Black	Red