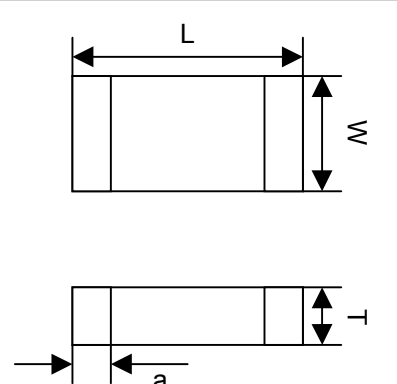




Multilayer Chip Ferrite Inductor (SDFL Series)

• Dimension



Type	L	W	T	A
SDFL1005 [0402]	1.0±0.15 [.039±.006]	0.5±0.15 [.020±.006]	0.5±0.15 [.020±.006]	0.25±0.10 [.010±.004]
SDFL1608 [0603]	1.6±0.15 [.063±.006]	0.8±0.15 [.031±.006]	0.8±0.15 [.031±.006]	0.3±0.2 [.012±.008]
SDFL2012 [0805]	2.0 (+0.3, -0.1) [.079 (+.012, -.004)]	1.25±0.20 [.049±.008]	0.85±0.20 [.033±.008] 1.25±0.20 [.049±.008]	0.5±0.3 [.020±.012]
SDFL3216 [1206]	3.2±0.20 [.126±.008]	1.6±0.20 [.063±.008]	0.85±0.20 [.033±.008] 1.1±0.20 [.043±.008]	0.5±0.3 [.020±.012]

Unit: mm
Unit: mm [inch]

• Features

- Monolithic structure for high reliability
- Ultra compact size is available
- No cross coupling due to magnetic shielding
- Perfect shape for mounting with no directionality
- Excellent solderability and heat resistance for reflow and wave soldering processes
- Operating temperature: -55°C to +125°C

• Applications

- Widely use in communication equipment, audiovisual equipment, computers, remote controls, and etc.

• Part Number Identification

SDFL **1608** **Q** **1R0** **K** **T** **F**
 (1) (2) (3) (4) (5) (6) (7)

(1)

Product ID	
SDV	Chip ferrite inductor

(2)

Dimensions (L x W, mm)	
1005 [0402]	1.0 x 0.50
1608 [0603]	1.6 x 0.80
2012 [0805]	2.0 x 1.25
3216 [1206]	3.2 x 1.6

(3)

Material

(4)

Nominal Inductance	
Example	Nominal Value
47N	0.047μH
R10	0.1μH
1R0	1.0μH

(5)

Tolerance of Inductance	
K	±10%
M	±20%

(6)

Packing Type	
B	Bulk packing
T	Tape & reel packing

(7)

Hazardous Substance Free Products



● SDFL1005 Series

Part Number *	Inductance	Quality Factor (min.)	Test Frequency	Self Resonance Frequency (min.)	DC Resistance (max.)	Rated Current (max.)	Thickness
Unit	μH	-	MHz	MHz	Ω	mA	mm [inch]
Symbol	L	Q	Freq.	S.R.F	DCR	I _r	T
SDFL1005L47N□	0.047	10	50	220	0.45	25	0.5±0.15 [.020±.006]
SDFL1005L68N□	0.068	10	50	210	0.45	25	
SDFL1005L82N□	0.082	10	50	200	0.45	25	
SDFL1005LR10□	0.1	10	25	200	0.8	25	
SDFL1005LR12□	0.12	10	25	165	0.8	25	
SDFL1005LR15□	0.15	10	25	140	0.9	25	
SDFL1005LR18□	0.18	10	25	120	0.9	25	
SDFL1005LR22□	0.22	10	25	110	1.2	25	
SDFL1005LR27□	0.27	15	25	95	1.2	25	
SDFL1005LR33□	0.33	15	25	85	1.25	18	
SDFL1005QR39□	0.39	20	10	85	0.6	15	
SDFL1005QR47□	0.47	20	10	80	0.7	15	
SDFL1005QR56□	0.56	20	10	75	0.8	15	
SDFL1005QR68□	0.68	20	10	70	0.9	15	
SDFL1005QR82□	0.82	20	10	65	0.9	15	
SDFL1005P1R0□	1.0	20	10	60	1.0	15	
SDFL1005P1R2□	1.2	20	10	55	1.25	15	
SDFL1005P1R5□	1.5	20	10	50	1.4	15	
SDFL1005P1R8□	1.8	20	10	45	1.55	15	
SDFL1005P2R2□	2.2	20	10	40	1.7	10	
SDFL1005Q1R0□	1.0	20	10	40	0.9	15	
SDFL1005Q1R2□	1.2	20	10	35	1.2	15	
SDFL1005Q1R5□	1.5	20	10	30	1.2	15	
SDFL1005Q1R8□	1.8	20	10	30	1.45	15	
SDFL1005Q2R2□	2.2	20	10	28	1.7	10	
SDFL1005Q2R7□	2.7	20	10	28	2.4	10	
SDFL1005Q3R3□	3.3	20	10	28	2.7	10	

* □: Tolerance levels other than ±10% or ±20% are also available.

● SDFL1608 Series

Part Number *	Inductance	Quality Factor (min.)	Test Frequency	Self Resonance Frequency (min.)	DC Resistance (max.)	Rated Current (max.)	Thickness
Unit	μH	-	MHz	MHz	Ω	mA	mm [inch]
Symbol	L	Q	Freq.	S.R.F	DCR	I _r	T
SDFL1608L47N□	0.047	10	25	260	0.3	50	0.5±0.15 [.020±.006]
SDFL1608L68N□	0.068	10	25	250	0.3	50	
SDFL1608L82N□	0.082	10	10	245	0.3	50	
SDFL1608LR10□	0.1	15	10	240	0.5	50	
SDFL1608LR12□	0.12	15	10	205	0.5	50	
SDFL1608LR15□	0.15	15	10	180	0.6	50	
SDFL1608LR18□	0.18	15	10	165	0.6	50	
SDFL1608LR22□	0.22	15	10	150	0.8	50	
SDFL1608LR27□	0.27	15	10	136	0.8	50	
SDFL1608LR33□	0.33	15	10	125	0.85	35	
SDFL1608LR39□	0.39	15	10	110	1	35	
SDFL1608LR47□	0.47	15	10	105	1.35	35	
SDFL1608LR56□	0.56	15	10	95	1.55	35	
SDFL1608LR68□	0.68	15	10	90	1.7	35	
SDFL1608LR82□	0.82	15	10	85	2.1	35	



● **SDFL1608 Series** (continued from the preceding page)

Part Number *	Inductance	Quality Factor (min.)	Test Frequency	Self Resonance Frequency (min.)	DC Resistance (max.)	Rated Current (max.)	Thickness
Unit	μH	-	MHz	MHz	Ω	mA	mm [inch]
Symbol	L	Q	Freq.	S.R.F	DCR	I _r	T
SDFL1608B1R0□	1.0	35	10	90	0.70	25	0.8±0.15 [.031±.006]
SDFL1608B1R2□	1.2	35	10	85	0.80	25	
SDFL1608B1R5□	1.5	35	10	80	0.95	25	
SDFL1608B1R8□	1.8	35	10	75	1.15	25	
SDFL1608B2R2□	2.2	35	10	70	1.25	25	
SDFL1608P1R0□	1.0	35	10	90	0.6	25	
SDFL1608P1R1□	1.1	35	10	90	0.6	25	
SDFL1608P1R2□	1.2	35	10	85	0.8	25	
SDFL1608P1R5□	1.5	35	10	80	0.8	25	
SDFL1608P1R8□	1.8	35	10	75	0.95	15	
SDFL1608P2R2□	2.2	35	10	70	1.15	25	
SDFL1608Q1R0□	1.0	35	10	75	0.6	25	
SDFL1608Q1R1□	1.1	35	10	75	0.6	25	
SDFL1608Q1R2□	1.2	35	10	65	0.8	25	
SDFL1608Q1R5□	1.5	35	10	60	0.8	25	
SDFL1608Q1R8□	1.8	35	10	55	0.95	25	
SDFL1608Q2R2□	2.2	35	10	50	1.15	15	
SDFL1608Q2R7□	2.7	35	10	45	1.35	15	
SDFL1608Q3R3□	3.3	35	10	40	1.55	15	
SDFL1608Q3R9□	3.9	35	10	35	1.7	15	
SDFL1608Q4R7□	4.7	35	10	33	2.1	15	
SDFL1608S5R6□	5.6	35	4	22	1.55	5	
SDFL1608S6R8□	6.8	35	4	20	1.7	5	
SDFL1608S8R2□	8.2	35	4	18	2.1	5	
SDFL1608S100□	10	30	2	17	1.85	3	
SDFL1608S120□	12	30	2	15	2.1	3	
SDFL1608T150□	15	20	1	14	1.7	1	
SDFL1608T180□	18	20	1	13	1.85	1	
SDFL1608T220□	22	20	1	11	2.1	1	
SDFL1608T270□	27	20	1	10	2.75	1	
SDFL1608T330□	33	20	1	9	2.95	1	

* □: Tolerance levels other than ±10% or ±20% are also available.



● SDFL2012 Series

Part Number *	Inductance	Quality Factor (min.)	Test Frequency	Self Resonance Frequency (min.)	DC Resistance (max.)	Rated Current (max.)	Thickness
Unit	μH	-	MHz	MHz	Ω	mA	mm [inch]
Symbol	L	Q	Freq.	S.R.F	DCR	Ir	T
SDFL2012L47N□	0.047	15	50	320	0.2	300	0.85±0.2 [.033±.008]
SDFL2012L68N□	0.068	15	50	280	0.2	300	
SDFL2012L82N□	0.082	15	50	255	0.2	300	
SDFL2012LR10□	0.1	20	25	235	0.3	250	
SDFL2012LR12□	0.12	20	25	220	0.3	250	
SDFL2012LR15□	0.15	20	25	200	0.4	250	
SDFL2012LR18□	0.18	20	25	185	0.4	250	
SDFL2012LR22□	0.22	20	25	170	0.5	250	
SDFL2012LR27□	0.27	20	25	150	0.5	250	
SDFL2012LR33□	0.33	20	25	145	0.55	250	
SDFL2012LR39□	0.39	25	25	135	0.65	200	
SDFL2012LR47□	0.47	25	25	125	0.65	200	
SDFL2012LR56□	0.56	25	25	115	0.75	150	
SDFL2012LR68□	0.68	25	25	105	0.8	150	
SDFL2012LR82□	0.82	25	25	100	1	150	
SDFL2012P1R0□	1.0	45	10	95	0.4	50	
SDFL2012P1R2□	1.2	45	10	85	0.5	50	
SDFL2012P1R5□	1.5	45	10	80	0.5	50	
SDFL2012P1R8□	1.8	45	10	75	0.6	50	
SDFL2012P2R2□	2.2	45	10	70	0.65	30	
SDFL2012Q1R0□	1.0	45	10	75	0.4	50	
SDFL2012Q1R1□	1.1	45	10	65	0.5	50	
SDFL2012Q1R2□	1.2	45	10	65	0.5	50	
SDFL2012Q1R5□	1.5	45	10	60	0.5	50	
SDFL2012Q1R8□	1.8	45	10	55	0.6	50	
SDFL2012Q2R2□	2.2	45	10	50	0.65	30	
SDFL2012Q2R4□	2.4	45	10	47	0.70	30	
SDFL2012Q2R7□	2.7	45	10	45	0.75	30	
SDFL2012Q3R3□	3.3	45	10	41	0.8	30	
SDFL2012Q3R9□	3.9	45	10	38	0.9	30	
SDFL2012Q4R7□	4.7	45	10	35	1	30	
SDFL2012S5R6□	5.6	50	4	32	0.9	15	
SDFL2012S6R8□	6.8	50	4	29	1	15	
SDFL2012S8R2□	8.2	50	4	26	1.1	15	
SDFL2012S100□	10	50	2	24	1.15	15	
SDFL2012S120□	12	50	2	22	1.25	15	
SDFL2012T150□	15	30	1	19	0.8	5	
SDFL2012T180□	18	30	1	18	0.9	5	
SDFL2012T220□	22	30	1	16	1.1	5	
SDFL2012T270□	27	30	1	14	1.15	5	
SDFL2012T330□	33	30	0.4	13	1.25	5	
SDFL2012T390□	39	35	2	8	2.9	4	
SDFL2012T470□	47	35	2	7.5	3	4	
SDFL2012T560□	56	35	2	7	3.1	4	
SDFL2012T680□	68	25	1	6.5	2.9	2	
SDFL2012T820□	82	25	1	6	3	2	
SDFL2012T101□	100	25	1	5.5	3.1	2	

* □: Tolerance levels other than ±10% or ±20% are also available.



● SDFL3216 Series

Part Number *	Inductance	Quality Factor (min.)	Test Frequency	Self Resonance Frequency (min.)	DC Resistance (max.)	Rated Current (max.)	Thickness
Unit	μH	-	MHz	MHz	Ω	mA	mm [inch]
Symbol	L	Q	Freq.	S.R.F	DCR	I _r	T
SDFL3216L47N□	0.047	20	50	320	0.15	300	0.85±0.2 [.033±.008]
SDFL3216L68N□	0.068	20	50	280	0.25	300	
SDFL3216LR10□	0.1	20	25	235	0.25	250	
SDFL3216LR12□	0.12	20	25	220	0.3	250	
SDFL3216LR15□	0.15	20	25	200	0.3	250	
SDFL3216LR18□	0.18	20	25	185	0.4	250	
SDFL3216LR22□	0.22	20	25	170	0.4	250	
SDFL3216LR27□	0.27	20	25	150	0.5	250	
SDFL3216LR33□	0.33	20	25	145	0.6	250	
SDFL3216LR39□	0.39	25	25	135	0.5	200	
SDFL3216LR47□	0.47	25	25	125	0.6	200	
SDFL3216LR56□	0.56	25	25	115	0.7	150	
SDFL3216LR68□	0.68	25	25	105	0.8	150	
SDFL3216LR82□	0.82	25	25	100	0.9	150	
SDFL3216Q1R0□	1.0	45	10	75	0.4	100	
SDFL3216Q1R2□	1.2	45	10	65	0.5	100	
SDFL3216Q1R5□	1.5	45	10	60	0.5	50	
SDFL3216Q1R8□	1.8	45	10	55	0.5	50	
SDFL3216Q2R2□	2.2	45	10	50	0.6	50	
SDFL3216Q2R7□	2.7	45	10	45	0.6	50	
SDFL3216Q3R3□	3.3	45	10	41	0.7	50	
SDFL3216Q3R9□	3.9	45	10	38	0.8	50	
SDFL3216Q4R7□	4.7	45	10	35	0.9	50	
SDFL3216S5R6□	5.6	50	4	32	0.7	25	
SDFL3216S6R8□	6.8	50	4	29	0.8	25	
SDFL3216S8R2□	8.2	50	4	26	0.9	25	
SDFL3216S100□	10	50	2	24	1	25	
SDFL3216S120□	12	50	2	22	1.05	15	
SDFL3216T150□	15	35	1	19	0.7	5	
SDFL3216T180□	18	35	1	18	0.7	5	
SDFL3216T220□	22	35	1	16	0.9	5	
SDFL3216T270□	27	35	1	14	0.9	5	
SDFL3216T330□	33	35	0.4	13	1.05	5	
SDFL3216T390□	39	40	2	11	3	5	
SDFL3216T470□	47	40	2	10	3.4	5	
SDFL3216T560□	56	40	2	9.5	3.8	4	
SDFL3216T680□	68	40	1	9.5	3	4	
SDFL3216T820□	82	40	1	9	3.4	4	
SDFL3216T101□	100	40	1	8	3.8	4	

* □: Tolerance levels other than ±10% or ±20% are also available.