

SMTSDR SERIES

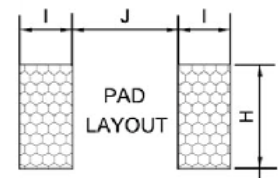
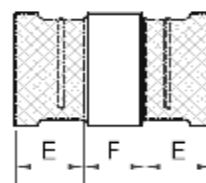
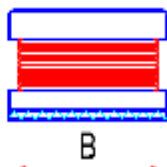
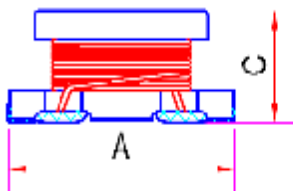
MINIATURE SMD CHIP CHOKE COILS

Applications :

- Pagers, Cordless phone.
- High Freq. Communication Products.
- Personal computers.
- Disk Drives and computer peripherals.
- DC power supply circuits.



Shape and Dimensions (Dimensions are in mm) :



Item	A	B	C	E Min.	F Min.	H	I	J
SMTSDR322515	3.2±0.3	2.5±0.2	1.55±0.3	0.7	0.7	2.0	1.5	1.0
SMTSDR321618C	3.2±0.3	1.6±0.2	1.8±0.3	0.7	0.7	1.5	1.5	1.0
SMTSDR322520(C)	3.2±0.3	2.5±0.2	2.0±0.3	0.7	0.7	2.0	1.5	1.0
SMTSDR453226(C)	4.5±0.3	3.2±0.2	2.6±0.3	1.0	1.0	3.0	2.0	1.2
SMTSDR575047C	5.7±0.3	5.0±0.3	4.7±0.3	1.3	1.7	5.0	2.0	2.0

Features :

- These miniature chip inductors wound on a special ferrite core.
- SMTSDR322520 / 453226 / 322515 are high Q value at high frequencies and low DC resistance.
- SMTSDR321618C / 322520C / 453226C / 565047C are low DC resistance, high current capacity, and high impedance characteristics. They are excellent for use as choke coil in DC power supply circuits.

Characteristics :

- Rated Current: It is either the inductance is 10% lower than its initial value in DC. saturation characteristics or temperature raise becomes $\Delta T=20^{\circ}\text{C}$ ($T_a=20^{\circ}\text{C}$), whichever is lower.
- Operating temp. : -30°C to 105°C .

Product identification :

S M T S D R 4 5 3 2 2 6 C - 1 0 1 K
(1) (2) (3) (4) (5)

- (1) Type : **Surface Mounting Type**.
- (2) Style : **SDR** Type core, **L**=4.5mm **W**=3.2 **H**t=2.6.
- (3) **C**: for Choke use, No **C**: for general use.
- (4) Inductance : **101** for **100uH**.
- (5) Inductance tolerance : **J** : ±5%; **K** : ±10%; **M** : ±20%.

Test equipments :

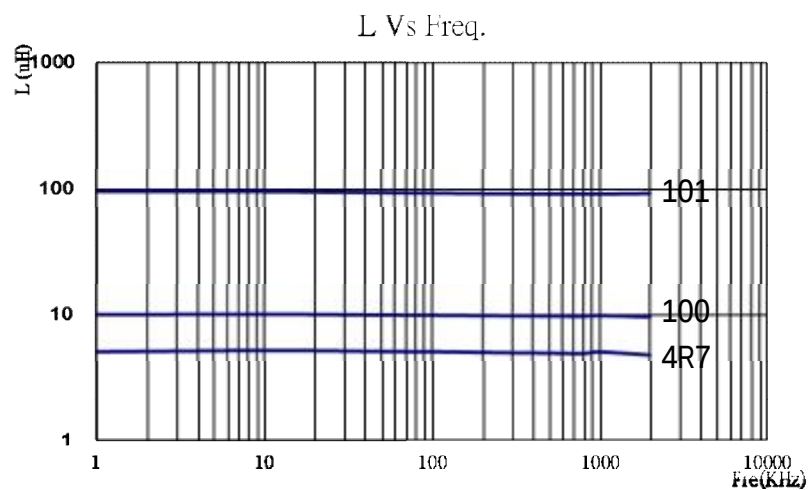
- Inductance measured at 0Adc on HP 4284A LCR meter or equivalent.
- DCR measured on Chroma 16502 micro-ohmmeter or equivalent.
- Electrical specifications at 25°C .



I SMTSDR 322515 series

Part No.	Inductance L (μ H)	TEST Freq. (0.1V)	DCR (Ω) Max.	Rated Current (mA) Max.	SRF (MHz) Min.
SMTSDR322515-1R0M	1.0	1MHz	0.078	1000	100
SMTSDR322515-2R2M	2.2	1MHz	0.126	790	64
SMTSDR322515-4R7M	4.7	1MHz	0.195	650	43
SMTSDR322515-100K	10	1MHz	0.42	400	26
SMTSDR322515-150K	15	1MHz	0.75	300	22
SMTSDR322515-220K	22	1MHz	0.92	250	19
SMTSDR322515-330K	33	1MHz	1.40	200	17
SMTSDR322515-470K	47	1MHz	2.75	170	13
SMTSDR322515-680K	68	1MHz	3.60	130	9
SMTSDR322515-101K	100	1MHz	4.50	100	8

Typical performance curves :

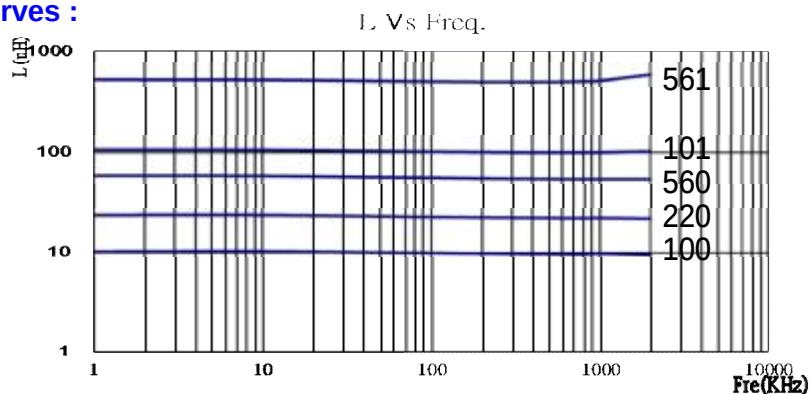




I SMTSDR 322520 series

Part No.	Inductance (μH)			Quality Factor		DCR (Ω) Max.	SRF (MHz) Min.	Rated Current (mA) Max.
	Nominal Value	Tolerance (±%)	Test Freq.	Spec. Min.	Test Freq.			
SMTSDR322520 -1R0□	1.0	M	1MHz	20	1MHz	0.50	100	445
SMTSDR322520 -1R2□	1.2	M	1MHz	20	1MHz	0.60	100	425
SMTSDR322520 -1R5□	1.5	M,K	1MHz	20	1MHz	0.60	75	400
SMTSDR322520 -1R8□	1.8	M,K	1MHz	20	1MHz	0.70	60	390
SMTSDR322520 -2R2□	2.2	M,K	1MHz	20	1MHz	0.80	50	370
SMTSDR322520 -2R7□	2.7	M,K	1MHz	20	1MHz	0.90	43	320
SMTSDR322520 -3R3□	3.3	M,K	1MHz	20	1MHz	1.0	38	300
SMTSDR322520 -3R9□	3.9	M,K	1MHz	20	1MHz	1.1	35	290
SMTSDR322520 -4R7□	4.7	M,K	1MHz	20	1MHz	1.2	31	270
SMTSDR322520 -5R6□	5.6	M,K	1MHz	20	1MHz	1.3	28	250
SMTSDR322520 -6R8□	6.8	M,K	1MHz	20	1MHz	1.5	25	240
SMTSDR322520 -8R2□	8.2	M,K	1MHz	20	1MHz	1.6	23	225
SMTSDR322520 -100□	10	K,J	1MHz	35	1MHz	1.8	20	190
SMTSDR322520 -120□	12	K,J	1MHz	35	1MHz	2.0	18	180
SMTSDR322520 -150□	15	K,J	1MHz	35	1MHz	2.2	16	170
SMTSDR322520 -180□	18	K,J	1MHz	35	1MHz	2.5	15	165
SMTSDR322520 -220□	22	K,J	1MHz	35	1MHz	2.8	14	150
SMTSDR322520 -270□	27	K,J	1MHz	35	1MHz	3.1	13	125
SMTSDR322520 -330□	33	K,J	1MHz	40	1MHz	3.5	12	115
SMTSDR322520 -390□	39	K,J	1MHz	40	1MHz	3.9	11	110
SMTSDR322520 -470□	47	K,J	1MHz	40	1MHz	4.3	11	100
SMTSDR322520 -560□	56	K,J	1MHz	40	1MHz	4.9	10.0	85
SMTSDR322520 -680□	68	K,J	1MHz	40	1MHz	5.5	9.0	80
SMTSDR322520 -820□	82	K,J	1MHz	40	1MHz	6.2	8.5	70
SMTSDR322520 -101□	100	K,J	1MHz	40	796kHz	7.0	8.0	80
SMTSDR322520 -121□	120	K,J	1MHz	40	796kHz	8.0	7.5	75
SMTSDR322520 -151□	150	K,J	1MHz	40	796kHz	9.3	7.0	70
SMTSDR322520 -181□	180	K,J	1MHz	40	796kHz	10.2	6.0	65
SMTSDR322520 -221□	220	K,J	1MHz	40	796kHz	11.8	5.5	65
SMTSDR322520 -271□	270	K,J	1MHz	40	796kHz	12.5	5.0	65
SMTSDR322520 -331□	330	K,J	1MHz	40	796kHz	13.0	5.0	65
SMTSDR322520 -391□	390	K,J	1MHz	50	796kHz	22.0	5.0	50
SMTSDR322520 -471□	470	K,J	1kHz	50	796kHz	25.0	5.0	45
SMTSDR322520 -561□	560	K,J	1kHz	50	796kHz	28.0	5.0 (REF.)	40

Typical performance curves :

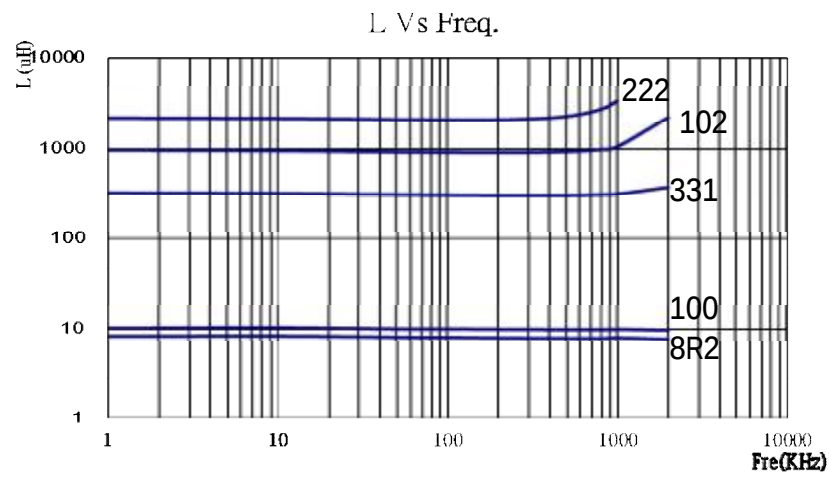




I SMTSDR 453226 series

Part No.	Inductance(uH)			Quality Factor		DCR (Ω) Max.	SRF (MHz) Min.	Rated Current (mA) Max.
	Nominal Value	Tolerance (±%)	Test Freq.	Spec. Min.	Test Freq.			
SMTSDR453226 -1R0□	1.0	M	1MHz	20	1MHz	0.20	120	500
SMTSDR453226 -1R2□	1.2	M	1MHz	20	1MHz	0.20	100	500
SMTSDR453226 -1R5□	1.5	M	1MHz	20	1MHz	0.30	85	500
SMTSDR453226 -1R8□	1.8	M	1MHz	20	1MHz	0.30	75	500
SMTSDR453226 -2R2□	2.2	M	1MHz	20	1MHz	0.30	62	500
SMTSDR453226 -2R7□	2.7	M	1MHz	20	1MHz	0.32	53	500
SMTSDR453226 -3R3□	3.3	M	1MHz	20	1MHz	0.35	47	500
SMTSDR453226 -3R9□	3.9	M	1MHz	20	1MHz	0.38	41	500
SMTSDR453226 -4R7□	4.7	M,K	1MHz	30	1MHz	0.40	38	500
SMTSDR453226 -5R6□	5.6	M,K	1MHz	30	1MHz	0.47	33	500
SMTSDR453226 -6R8□	6.8	M,K	1MHz	30	1MHz	0.50	31	450
SMTSDR453226 -8R2□	8.2	M,K	1MHz	30	1MHz	0.56	27	450
SMTSDR453226 -100□	10	K,J	1MHz	35	1MHz	0.56	23	400
SMTSDR453226 -120□	12	K,J	1MHz	35	1MHz	0.62	21	380
SMTSDR453226 -150□	15	K,J	1MHz	35	1MHz	0.73	19	360
SMTSDR453226 -180□	18	K,J	1MHz	35	1MHz	0.82	17	340
SMTSDR453226 -220□	22	K,J	1MHz	35	1MHz	0.94	15	320
SMTSDR453226 -270□	27	K,J	1MHz	35	1MHz	1.1	14	300
SMTSDR453226 -330□	33	K,J	1MHz	35	1MHz	1.2	12	270
SMTSDR453226 -390□	39	K,J	1MHz	35	1MHz	1.4	11	240
SMTSDR453226 -470□	47	K,J	1MHz	35	1MHz	1.5	10	220
SMTSDR453226 -560□	56	K,J	1MHz	35	1MHz	1.7	9.3	200
SMTSDR453226 -680□	68	K,J	1MHz	35	1MHz	1.9	8.4	180
SMTSDR453226 -820□	82	K,J	1MHz	35	1MHz	2.2	7.5	170
SMTSDR453226 -101□	100	K,J	1MHz	40	796kHz	2.5	6.8	160
SMTSDR453226 -121□	120	K,J	1MHz	40	796kHz	3.0	6.2	150
SMTSDR453226 -151□	150	K,J	1MHz	40	796kHz	3.7	5.5	130
SMTSDR453226 -181□	180	K,J	1MHz	40	796kHz	4.5	5.0	120
SMTSDR453226 -221□	220	K,J	1MHz	40	796kHz	5.4	4.5	110
SMTSDR453226 -271□	270	K,J	1MHz	40	796kHz	6.8	4.0	100
SMTSDR453226 -331□	330	K,J	1MHz	40	796kHz	8.2	3.6	95
SMTSDR453226 -391□	390	K,J	1MHz	40	796kHz	9.7	3.3	90
SMTSDR453226 -471□	470	K,J	1kHz	40	796kHz	11.8	3.0	80
SMTSDR453226 -561□	560	K,J	1kHz	40	796kHz	14.5	2.7	70
SMTSDR453226 -681□	680	K,J	1kHz	40	796kHz	17.0	2.5	65
SMTSDR453226 -821□	820	K,J	1kHz	40	796kHz	20.5	2.2	60
SMTSDR453226 -102□	1000	K,J	1kHz	40	252kHz	25.0	2.0	55
SMTSDR453226 -122□	1200	K,J	1kHz	40	252kHz	30.0	1.8	50
SMTSDR453226 -152□	1500	K,J	1kHz	40	252kHz	37.0	1.6	45
SMTSDR453226 -182□	1800	K,J	1kHz	40	252kHz	45.0	1.5	35
SMTSDR453226 -222□	2200	K,J	1kHz	40	252kHz	50.0	1.3	30

Typical performance curves :





I SMTSDR321618C series

Part No.	Inductance L (μ H)	Tolerance ($\pm$ %)	Test Freq. (MHz)	DCR (Ω) Max.	SRF (MHz) Min.	Rated Current (mA) Max.
SMTSDR321618C -R22□	0.22	M	1MHz	0.140	250	850
SMTSDR321618C -R47□	0.47	M	1MHz	0.210	180	700
SMTSDR321618C -1R0□	1.0	M	1MHz	0.364	100	510
SMTSDR321618C -2R2□	2.2	M	1MHz	0.533	50	430
SMTSDR321618C -4R7□	4.7	M,K	1MHz	0.845	31	340
SMTSDR321618C -100□	10	K,J	1MHz	1.690	20	230
SMTSDR321618C -220□	22	K,J	1MHz	3.900	14	160
SMTSDR321618C -470□	47	K,J	1MHz	10.40	10	100
SMTSDR321618C -101□	100	K,J	1MHz	15.60	7	80
SMTSDR322520C -1R0□	1.0	M	1MHz	0.078	100	1000
SMTSDR322520C -2R2□	2.2	M	1MHz	0.126	64	790
SMTSDR322520C -4R7□	4.7	M	1MHz	0.195	43	450
SMTSDR322520C -100□	10	M	1MHz	0.572	26	300
SMTSDR322520C -220□	22	M,K	1MHz	0.923	19	250
SMTSDR322520C -470□	47	M,K	1MHz	1.69	12	170
SMTSDR322520C -101□	100	K,J	1MHz	4.55	8	100
SMTSDR322520C -221□	220	K,J	1MHz	10.92	5.5	70
SMTSDR322520C -331□	330	K,J	1MHz	13.00	4.5	60
SMTSDR322520C -391□	390	K,J	1MHz	22.10	4	60
SMTSDR322520C -471□	470	K,J	1MHz	24.70	3.7	60
SMTSDR322520C -561□	560	K,J	1MHz	28.60	3.4	60
SMTSDR453226C -1R0□	1.0	M	1MHz	0.08	100	1080
SMTSDR453226C -1R5□	1.5	M	1MHz	0.09	85	1000
SMTSDR453226C -2R2□	2.2	M	1MHz	0.11	60	900
SMTSDR453226C -3R3□	3.3	M	1MHz	0.13	47	800
SMTSDR453226C -4R7□	4.7	M,K	1MHz	0.15	35	750
SMTSDR453226C -6R8□	6.8	M,K	1MHz	0.20	30	720
SMTSDR453226C -100□	10	K,J	1MHz	0.24	23	650
SMTSDR453226C -150□	15	K,J	1MHz	0.32	20	570
SMTSDR453226C -220□	22	K,J	1MHz	0.60	15	420
SMTSDR453226C -330□	33	K,J	1MHz	1.0	12	310
SMTSDR453226C -470□	47	K,J	1MHz	1.1	10	280
SMTSDR453226C -680□	68	K,J	1MHz	1.7	8.4	220
SMTSDR453226C -101□	100	K,J	1MHz	2.2	6.8	190
SMTSDR453226C -151□	150	K,J	1MHz	3.5	5.5	130
SMTSDR453226C -221□	220	K,J	1MHz	4.0	4.5	110
SMTSDR453226C -331□	330	K,J	1MHz	6.8	3.6	100
SMTSDR453226C -471□	470	K,J	1MHz	8.5	3.0	90



I SMTSDR575047C series

Part No.	Inductance L (μ H)	Tolerance ($\pm$ %)	Test Freq. (MHz)	DCR (Ω) Max.	SRF (MHz) Min.	Rated Current (mA) Max.
SMTSDR575047C -R12□	0.12	M	1MHz	0.0098	450	6000
SMTSDR575047C -R27□	0.27	M	1MHz	0.0140	300	5300
SMTSDR575047C -R47□	0.47	M	1MHz	0.0182	200	4800
SMTSDR575047C -1R0□	1.0	M	1MHz	0.0270	150	4000
SMTSDR575047C -1R5□	1.5	M	1MHz	0.0310	110	3700
SMTSDR575047C -2R2□	2.2	M	1MHz	0.0410	80	3200
SMTSDR575047C -3R3□	3.3	M	1MHz	0.0500	40	2900
SMTSDR575047C -4R7□	4.7	M	1MHz	0.0574	30	2700
SMTSDR575047C -6R8□	6.8	M	1MHz	0.1040	25	2000
SMTSDR575047C -100□	10	M,K	1MHz	0.1300	20	1700
SMTSDR575047C -150□	15	M,K	1MHz	0.210	17	1400
SMTSDR575047C -220□	22	M,K	1MHz	0.266	15	1200
SMTSDR575047C -330□	33	M,K	1MHz	0.448	12	900
SMTSDR575047C -470□	47	M,K	1MHz	0.560	10(REF.)	800
SMTSDR575047C -680□	68	M,K	1MHz	0.938	7.6	640
SMTSDR575047C -101□	100	M,K	100kHz	1.204	6.5(REF.)	560
SMTSDR575047C -151□	150	M,K	100kHz	2.660	5.0(REF.)	420
SMTSDR575047C -221□	220	M,K	100kHz	3.360	4.0	320
SMTSDR575047C -331□	330	M,K	100kHz	6.160	3.1	270
SMTSDR575047C -471□	470	M,K	100kHz	7.560	2.4	240
SMTSDR575047C -681□	680	M,K	100kHz	11.34	1.9	190
SMTSDR575047C -102□	1000	M,K	10kHz	14.42	1.7	150
SMTSDR575047C -222□	2200	M,K	10kHz	30.10	1.2	100
SMTSDR575047C -472□	4700	M,K	10kHz	61.04	0.8	70
SMTSDR575047C -103□	10000	M,K	10kHz	140.0	0.5	50

* 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 for better known.