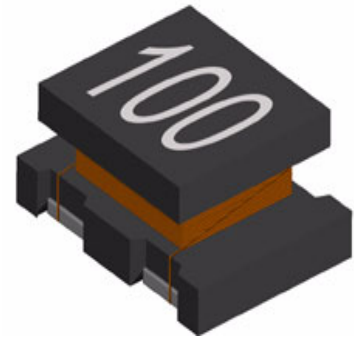


VLH Series — Miniature SMD Power Inductor

Features

- Wirewound of ferrite core miniature chip Inductor
- VLH322520/453226 offer low DCR with a high Q value
- High Current option available
- For Inductance values outside those listed in the datasheet contact factory



Applications

- Cellular Phones
- Personal computers
- Pagers
- Disk drives
- Computer peripherals
- DC Power supply

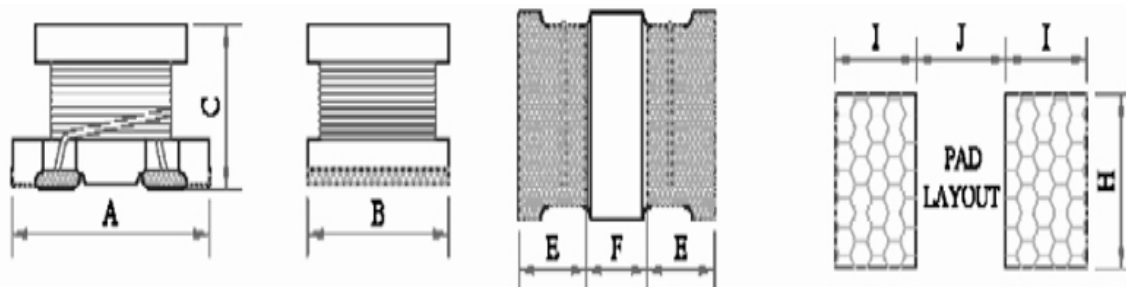
Inductance and Current ranges

• VLH201609E	0.10 ~ 120 μ H	2.30 ~ 0.05A
• VLH201514	0.10 ~ 120 μ H	4.24 ~ 0.023A
• VLH322515	1.00 ~ 100 μ H	1.00 ~ 0.10A
• VLH322520	0.10 ~ 560 μ H	0.70 ~ 0.04A
• VLH453226	1.00 ~ 2200 μ H	0.50 ~ 0.03A
• VLH321618C	0.12 ~ 100 μ H	0.97 ~ 0.08A
• VLH322520C	1.00 ~ 560 μ H	1.00 ~ 0.06A
• VLH453226C	1.00 ~ 470 μ H	1.08 ~ 0.09A
• VLH575047C	0.12 ~ 10000 μ H	6.00 ~ 0.05A

How to Order

VLH		453226		C		S		101		K	
SEI Type		Dimensions		Special		Special		Inductance		Tolerance	
Type	Description	Code		Code	EIA	Code	EIA	Code	Inductance	Code	Tolerance
VLH	SMD Choke chip	201514		Blank	General Use	-	Std	R12	0.12 μ H	J	\pm 5%
		201609E		C	Choke Use	S	Shielded	120	12 μ H	K	\pm 10%
		321618						101	100 μ H	M	\pm 20%
		322515						102	1000 μ H		
		322520									
		453226									
		575047									

VLH Series — Miniature SMD Power Inductor



Mechanical Specifications

Type/Code	A	B	C	E min.	F min.	H	I	J	Units
VLH201609E	0.079 ± 0.012 2.0 ± 0.3	0.063 ± 0.012 1.6 ± 0.3	0.035 ± 0.008 0.9 ± 0.2	0.032 0.8	0.032 0.8	0.087 2.2	0.039 1.0	0.024 0.6	inches mm
VLH201514	0.079 ± 0.012 2.0 ± 0.3	0.059 ± 0.012 1.5 ± 0.3	0.055 ± 0.016 1.4 ± 0.4	0.020 0.5	0.039 1.0	0.059 1.5	0.059 1.5	0.059 1.0	inches mm
VLH321618(C)	0.126 ± 0.012 3.2 ± 0.3	0.063 ± 0.008 1.6 ± 0.2	0.071 ± 0.012 1.8 ± 0.3	0.028 0.7	0.028 0.7	0.059 1.5	0.059 1.5	0.039 1.0	inches mm
VLH322515	0.126 ± 0.012 3.2 ± 0.3	0.098 ± 0.008 2.5 ± 0.2	0.061 ± 0.012 1.55 ± 0.3	0.028 0.7	0.028 0.7	0.079 2.0	0.059 1.5	0.039 1.0	inches mm
VLH322520(C)	0.126 ± 0.012 3.2 ± 0.3	0.098 ± 0.008 2.5 ± 0.2	0.079 ± 0.012 2.0 ± 0.3	0.028 0.7	0.028 0.7	0.079 2.0	0.059 1.5	0.039 1.0	inches mm
VLH453226(C)	0.177 ± 0.012 4.5 ± 0.3	0.126 ± 0.008 3.2 ± 0.2	0.102 ± 0.012 2.6 ± 0.3	0.039 1.0	0.039 1.0	0.118 3.0	0.079 2.0	0.047 1.2	inches mm
VLH575047C	0.224 ± 0.012 5.7 ± 0.3	0.197 ± 0.012 5.0 ± 0.3	0.185 ± 0.012 4.7 ± 0.3	0.051 1.3	0.067 1.7	0.197 5.0	0.079 2.0	0.079 2.0	inches mm

Electrical Characteristics - VLH201609E

Part Number	L (µH)	Tolerance (%)	DCR (Ω) Max	I DC (mA) Max
VLH201609E-R10	0.10 @100KHz	30	0.30	700
VLH201609E-R68	0.68 @100KHz	20	0.35	650
VLH201609E-R82	0.82 @100KHz	20	0.37	600
VLH201609E-1R0	1.0 @100KHz	20	0.39	445
VLH201609E-1R5	1.5 @100KHz	20, 10	0.52	400
VLH201609E-2R2	2.2 @100KHz	20, 10	0.624	370
VLH201609E-3R3	3.3 @100KHz	20, 10	0.78	300
VLH201609E-4R7	4.7 @100KHz	20, 10	1.04	270
VLH201609E-5R6	5.6 @100KHz	20, 10	1.17	250
VLH201609E-6R8	6.8 @100KHz	20, 10	1.30	240
VLH201609E-8R2	8.2 @100KHz	20, 10	1.56	225
VLH201609E-100	10 @1KHz	20, 10	1.93	190
VLH201609E-120	12 @1KHz	20, 10	2.37	180
VLH201609E-150	15 @1KHz	20, 10	3.20	170

VLH Series — Miniature SMD Power Inductor

Electrical Characteristics - VLH201609E

Part Number	L (μ H)	Tolerance (%)	DCR (Ω) Max	I DC (mA) Max
VLH201609E-180	18 @1KHz	20, 10	3.60	165
VLH201609E-220	22 @1KHz	20, 10	3.91	150
VLH201609E-270	27 @1KHz	20, 10	6.34	125
VLH201609E-330	33 @1KHz	20, 10	7.09	115
VLH201609E-390	39 @1KHz	20, 10	7.99	110
VLH201609E-470	47 @1KHz	20, 10	11.89	100
VLH201609E-560	56 @1KHz	20, 10	13.29	85
VLH201609E-680	68 @1KHz	20, 10	15.16	80
VLH201609E-820	82 @1KHz	20, 10	17.52	70
VLH201609E-101	100 @1KHz	20, 10	19.42	80
VLH201609E-121	120 @1KHz	20, 10	21.31	75

Electrical Characteristics - VLH201514

Part Number	L (μ H)	Tolerance (%)	DCR (Ω) Max	I DC (mA) Max
VLH201514-R10	0.10 @100KHz	30	0.018	4240
VLH201514-R12	.12 @100KHz	30	0.022	3970
VLH201514-R15	.15 @100KHz	30	0.023	3870
VLH201514-R18	0.18 @100KHz	30	0.029	3100
VLH201514-R22	0.22 @100KHz	30	0.034	3070
VLH201514-R27	0.27 @100KHz	30	0.042	2460
VLH201514-R33	0.33 @100KHz	30	0.048	2070
VLH201514-R39	0.39 @100KHz	30	0.059	1610
VLH201514-R47	0.47 @100KHz	30	0.068	1530
VLH201514-R56	0.56 @100KHz	30	0.091	1480
VLH201514-R68	0.68 @100KHz	30	0.101	1370
VLH201514-R82	0.82 @100KHz	30	0.116	1280
VLH201514-1R0	1.0 @100KHz	20	0.160	750
VLH201514-1R5	1.5 @100KHz	20	0.247	700
VLH201514-2R0	2.0 @100KHz	20	0.300	650
VLH201514-2R2	2.2 @100KHz	20	0.330	610
VLH201514-2R7	2.7 @100KHz	20	0.360	550
VLH201514-3R3	3.3 @100KHz	20	0.500	500
VLH201514-3R9	3.9 @100KHz	20	0.700	490
VLH201514-4R7	4.7 @100KHz	20	0.740	470
VLH201514-6R8	6.8 @100KHz	20	0.970	450
VLH201514-8R2	8.2 @100KHz	20	1.490	400
VLH201514-100	10 @1KHz	20, 10	1.620	370
VLH201514-120	12 @1KHz	20, 10	1.890	340
VLH201514-150	15 @1KHz	20, 10	2.170	320
VLH201514-220	22 @1KHz	20, 10	3.420	250
VLH201514-270	27 @1KHz	20, 10	4.280	210
VLH201514-330	33 @1KHz	20, 10	5.470	200
VLH201514-390	39 @1KHz	20, 10	6.290	170

VLH Series — Miniature SMD Power Inductor

Electrical Characteristics - VLH201514

Part Number	L (μ H)	Tolerance (%)	DCR (Ω) Max	I DC (mA) Max
VLH201514-470	47 @1KHz	20, 10	9.87	130
VLH201514-680	68 @1KHz	20, 10	12.17	110
VLH201514-820	82 @1KHz	20, 10	14.5	90
VLH201514-101	100 @1KHz	20, 10	19.62	80
VLH201514-121	120 @1KHz	20, 10	22.03	23

Electrical Characteristics - VLH322515

Part Number	L (μ H)	Tolerance (%)	DCR (Ω) Max	I DC (mA) Max	SRF (MHz)
VLH322515-1R0	1.0 @1MHz	20	0.078	1000	100
VLH322515-2R2	2.2 @1MHz	20	0.126	790	64
VLH322515-4R7	4.7 @1MHz	20	0.195	650	43
VLH322515-100	10 @1MHz	10	0.420	450	26
VLH322515-150	15 @1MHz	10	0.750	300	22
VLH322515-220	22 @1MHz	10	0.920	250	19
VLH322515-330	33 @1MHz	10	1.400	200	17
VLH322515-470	47 @1MHz	10	1.700	170	13
VLH322515-680	68 @1MHz	10	2.900	130	9
VLH322515-101	100 @1MHz	10	4.500	100	8

Electrical Characteristics - VLH322520

Part Number	L (μ H)	Tolerance (%)	SRF (MHz)	DCR (Ω) Max	I DC (mA) Max
VLH322520-R10	0.10 @1MHz	20	200	0.25	700
VLH322520-R18	0.18 @1MHz	20	200	0.25	650
VLH322520-R27	0.27 @1MHz	20	200	0.25	600
VLH322520-R39	0.39 @1MHz	20	200	0.25	530
VLH322520-R56	0.56 @1MHz	20	160	0.25	530
VLH322520-R68	0.68 @1MHz	20	160	0.25	470
VLH322520-R82	0.82 @1MHz	20	120	0.25	450
VLH322520-1R0	1.0 @1MHz	20	100	0.50	445
VLH322520-1R2	1.2 @1MHz	20	100	0.60	425
VLH322520-1R5	1.5 @1MHz	20, 10	75	0.60	400
VLH322520-1R8	1.8 @1MHz	20, 10	60	0.70	390
VLH322520-2R2	2.2 @1MHz	20, 10	50	0.80	370
VLH322520-2R7	2.7 @1MHz	20, 10	43	0.90	320
VLH322520-3R3	3.3 @1MHz	20, 10	38	1.00	300
VLH322520-3R9	3.9 @1MHz	20, 10	35	1.10	290
VLH322520-4R7	4.7 @1MHz	20, 10	31	1.20	270
VLH322520-5R6	5.6 @1MHz	20, 10	28	1.30	250
VLH322520-6R8	6.8 @1MHz	20, 10	25	1.50	240
VLH322520-8R2	8.2 @1MHz	20, 10	23	1.60	225
VLH322520-100	10 @1MHz	10, 5	20	1.80	190
VLH322520-120	12 @1MHz	10, 5	18	2.00	180
VLH322520-150	15 @1MHz	10, 5	16	2.20	170

VLH Series — Miniature SMD Power Inductor

Electrical Characteristics - VLH322520

Part Number	L (μH)	Tolerance (%)	SRF (MHz)	DCR (Ω) Max	I DC (mA) Max
VLH322520-180	18 @1MHz	10, 5	15	2.50	165
VLH322520-220	22 @1MHz	10, 5	14	2.80	150
VLH322520-270	27 @1MHz	10, 5	13	3.10	125
VLH322520-330	33 @1MHz	10, 5	12	3.50	115
VLH322520-390	39 @1MHz	10, 5	11	3.90	110
VLH322520-470	47 @1MHz	10, 5	11	4.30	100
VLH322520-560	56 @1MHz	10, 5	10	4.90	85
VLH322520-680	68 @1MHz	10, 5	9.0	5.50	80
VLH322520-820	82 @1MHz	10, 5	8.5	6.20	70
VLH322520-101	100 @1MHz	10, 5	8.0	7.00	80
VLH322520-121	120 @1MHz	10, 5	7.5	8.00	75
VLH322520-151	150 @1MHz	10, 5	7.0	9.30	70
VLH322520-181	180 @1MHz	10, 5	6.0	10.20	65
VLH322520-221	220 @1MHz	10, 5	5.5	11.80	65
VLH322520-271	270 @1MHz	10, 5	5.0	12.50	65
VLH322520-331	330 @1MHz	10, 5	5.0	13.00	65
VLH322520-391	390 @1MHz	10, 5	5.0	22.00	50
VLH322520-471	470 @1KHz	10, 5	5.0	25.00	45
VLH322520-561	560 @1KHz	10, 5	5.0	28.00	40

Electrical Characteristics - VLH453226

Part Number	L (μH)	Tolerance (%)	SRF (MHz)	DCR (Ω) Max	I DC (mA) Max
VLH453226-1R0	1.0 @1MHz	20	120	0.20	500
VLH453226-1R2	1.2 @1MHz	20	100	0.20	500
VLH453226-1R5	1.5 @1MHz	20	85	0.30	500
VLH453226-1R8	1.8 @1MHz	20	75	0.30	500
VLH453226-2R2	2.2 @1MHz	20	62	0.30	500
VLH453226-2R7	2.7 @1MHz	20	53	0.32	500
VLH453226-3R3	3.3 @1MHz	20	47	0.35	500
VLH453226-3R9	3.9 @1MHz	20	41	0.38	500
VLH453226-4R7	4.7 @1MHz	20, 10	38	0.40	500
VLH453226-5R6	5.6 @1MHz	20, 10	33	0.47	500
VLH453226-6R8	6.8 @1MHz	20, 10	31	0.50	450
VLH453226-8R2	8.2 @1MHz	20, 10	27	0.56	450
VLH453226-100	10 @1MHz	10, 5	23	0.56	400
VLH453226-120	12 @1MHz	10, 5	21	0.62	380
VLH453226-150	15 @1MHz	10, 5	19	0.73	360
VLH453226-180	18 @1MHz	10, 5	17	0.82	340
VLH453226-220	22 @1MHz	10, 5	15	0.94	320
VLH453226-270	27 @1MHz	10, 5	14	1.10	300
VLH453226-330	33 @1MHz	10, 5	12	1.20	270
VLH453226-390	39 @1MHz	10, 5	11	1.40	240
VLH453226-470	47 @1MHz	10, 5	10	1.50	220
VLH453226-560	56 @1MHz	10, 5	9.3	1.70	200

VLH Series — Miniature SMD Power Inductor

Electrical Characteristics - VLH453226

Part Number	L (μ H)	Tolerance (%)	SRF (MHz)	DCR (Ω) Max	I DC (mA) Max
VLH453226-680	68 @1MHz	10, 5	8.4	1.90	180
VLH453226-820	82 @1MHz	10, 5	7.5	2.20	170
VLH453226-101	100 @1MHz	10, 5	6.8	2.50	160
VLH453226-121	120 @1MHz	10, 5	6.2	3.00	150
VLH453226-151	150 @1MHz	10, 5	5.5	3.70	130
VLH453226-181	180 @1MHz	10, 5	5.0	4.50	120
VLH453226-221	220 @1MHz	10, 5	4.5	5.40	110
VLH453226-271	270 @1MHz	10, 5	4.0	6.80	100
VLH453226-331	330 @1MHz	10, 5	3.6	8.20	95
VLH453226-391	390 @1MHz	10, 5	3.3	9.70	90
VLH453226-471	470 @1KHz	10, 5	3.0	11.80	80
VLH453226-561	560 @1KHz	10, 5	2.7	14.50	70
VLH453226-681	680 @1KHz	10, 5	2.5	17.00	65
VLH453226-821	820 @1KHz	10, 5	2.2	20.50	60
VLH453226-102	1000 @1KHz	10, 5	2.0	25.00	50
VLH453226-122	1200 @1KHz	10, 5	1.8	30.00	45
VLH453226-152	1500 @1KHz	10, 5	1.6	37.00	40
VLH453226-182	1800 @1KHz	10, 5	1.5	45.00	35
VLH453226-222	2200 @1KHz	10, 5	1.3	50.00	30

Electrical Characteristics - VLH321618C

Part Number	L (μ H) @ 1MHz	Tolerance (%)	SRF (MHz)	DCR (Ω) Max	I DC (mA) Max
VLH321618C-R12	0.12	20	250	0.112	970
VLH321618C-R22	0.22	20	250	0.140	850
VLH321618C-R47	0.47	20	180	0.210	700
VLH321618C-1R0	1.0	20	100	0.364	510
VLH321618C-2R2	2.2	20	50	0.533	430
VLH321618C-4R7	4.7	20, 10	31	0.845	340
VLH321618C-100	10.0	10, 5	20	1.690	230
VLH321618C-220	22.0	10, 5	14	3.900	160
VLH321618C-470	47.0	10, 5	10	10.40	100
VLH321618C-101	100	10, 5	7	15.60	80

Electrical Characteristics - VLH322520C

Part Number	L (μ H) @ 1MHz	Tolerance (%)	SRF (MHz)	DCR (Ω) Max	I DC (mA) Max
VLH322520C-1R0	1.0	20	100	0.078	1000
VLH322520C-2R2	2.2	20	64	0.126	790
VLH322520C-4R7	4.7	20, 10	43	0.195	450
VLH322520C-100	10	20, 10	26	0.572	300
VLH322520C-220	22	20, 10	19	0.923	250
VLH322520C-470	47	20, 10	15	1.69	170
VLH322520C-101	100	10, 5	10	4.55	100
VLH322520C-151	150	10, 5	7	9.10	80
VLH322520C-221	220	10, 5	6.8	10.92	70

VLH Series — Miniature SMD Power Inductor

Electrical Characteristics - VLH322520C

Part Number	L (μ H) @ 1MHz	Tolerance (%)	SRF (MHz)	DCR (Ω) Max	I DC (mA) Max
VLH322520C-331	330	10, 5	5.6	13.00	60
VLH322520C-391	390	10, 5	5.0	22.10	60
VLH322520C-471	470	10, 5	5.0	24.70	60
VLH322520C-561	560	10, 5	5.0	28.60	60

Electrical Characteristics - VLH453226C

Part Number	L (μ H) @ 1MHz	Tolerance (%)	SRF (MHz)	DCR (Ω) Max	I DC (mA) Max
VLH453226C-1R0	1.0	20	100	0.08	1080
VLH453226C-1R5	1.5	20	85	0.09	1000
VLH453226C-2R2	2.2	20	60	0.11	900
VLH453226C-3R3	3.3	20	47	0.13	800
VLH453226C-4R7	4.7	20, 10	35	0.15	750
VLH453226C-6R8	6.8	20, 10	30	0.20	720
VLH453226C-100	10	10, 5	23	0.24	650
VLH453226C-150	15	10, 5	20	0.32	570
VLH453226C-220	22	10, 5	15	0.60	420
VLH453226C-330	33	10, 5	12	1.00	310
VLH453226C-470	47	10, 5	10	1.10	280
VLH453226C-680	68	10, 5	8.4	1.70	220
VLH453226C-101	100	10, 5	6.8	2.20	190
VLH453226C-151	150	10, 5	5.5	3.50	130
VLH453226C-221	220	10, 5	4.5	4.00	110
VLH453226C-331	330	10, 5	3.6	6.80	100
VLH453226C-471	470	10, 5	3.0	8.50	90

Electrical Characteristics - VLH575047C

Part Number	L (μ H) @ 1MHz	Tolerance (%)	SRF (MHz)	DCR (Ω) Max	I DC (mA) Max
VLH575047C-R12	0.12	20	450	0.0098	6000
VLH575047C-R27	0.27	20	300	0.0140	5300
VLH575047C-R47	0.47	20	200	0.0182	4800
VLH575047C-1R0	1.0	20	150	0.0272	4000
VLH575047C-1R5	1.5	20	110	0.0310	3700
VLH575047C-2R2	2.2	20	80	0.0410	3200
VLH575047C-3R3	3.3	20	40	0.0500	2900
VLH575047C-4R7	4.7	20	30	0.0574	2700
VLH575047C-6R8	6.8	20	25	0.1040	2000
VLH575047C-100	10	20, 10	20	0.1300	1700
VLH575047C-150	15	20, 10	17	0.210	1400
VLH575047C-220	22	20, 10	15	0.266	1200
VLH575047C-330	33	20, 10	12	0.448	900
VLH575047C-470	47	20, 10	10	0.560	800
VLH575047C-680	68	20, 10	7.6	0.938	640
VLH575047C-101	100	20, 10	6.5	1.204	560
VLH575047C-151	150	20, 10	5.0	2.660	420

VLH Series — Miniature SMD Power Inductor

Electrical Characteristics - VLH575047C

Part Number	L (μ H) @ 1MHz	Tolerance (%)	SRF (MHz)	DCR (Ω) Max	I DC (mA) Max
VLH575047C-221	220	20, 10	4.0	3.360	320
VLH575047C-331	330	20, 10	3.1	6.160	270
VLH575047C-471	470	20, 10	2.4	7.560	240
VLH575047C-681	680	20, 10	1.9	11.34	190
VLH575047C-102	1000	20, 10	1.7	14.42	150
VLH575047C-222	2200	20, 10	1.2	30.10	100
VLH575047C-472	4700	20, 10	0.8	61.04	70
VLH575047C-103	10000	20, 10	0.5	140.0	50