



VC SERIES

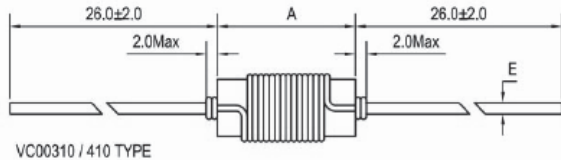
VARNISH COATED.

Applications :

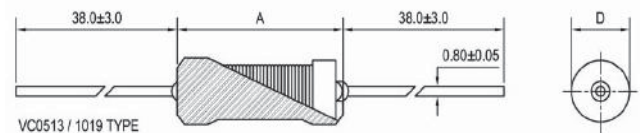
- TVs and Audio equipment.
- Telecommunication devices.
- RF filters.



Shape and Dimensions (Dimensions are in mm) :



VC00310 / 410 TYPE



VC0513 / 1019 TYPE

Item	A Max.	D Max.	E±0.05
VC0310	10.5	4.5	0.65
VC0410	10.5	5.5	0.80

Item	A Max.	D Max.	E±0.05
VC0513	16.5	6.6	0.80
VC1019	23.0	11.5	0.80

Features :

- Low cost power inductor.
- High current choke.
- Wide inductance range.
- High saturation ferrite core.
- Coated with varnish or covered with UL shrink tube.
- Tape and reel packaging for automatic insertion.
- RoHS compliant.

Product Identification :

VC 0410 - 1R0 K - UL - T5

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

- (1) Series: **V**arnish **C**oated.
 (2) Style: according to core size.
 (3) Inductance: **1R0** for **1.0uH**.
 (4) Inductance tolerance: **M**: ± 20%.

Characteristics :

- Temperature Rise Current(Irms): The current when temperature of coil increase up to max.
 $\Delta T=40^{\circ}\text{C}.$ ($T_a=20^{\circ}\text{C}$)
- Operating temperature : -25°C to 125°C .

Test equipments :

- L test by Wayne Kerr 3260B LCR meter with Wayne Kerr 3265B Bias Current Source.
- DCR tested by Milli-ohm meter.
- Electrical specifications at 25°C .



● **VC0310 / 0410 series**

Part No.	L (uH)	Q Min.	L / Q TestFreq MHz	SRF (MHz) Min.	DCR (Ω) Max.	Temperature Rise Current (mA)Max.	Core material
VC0310-1R0M	1.0	40	25.2	160	0.017	1800	Ferrite
VC0310-2R2K	2.2	20	7.96	150	0.025	1600	Ferrite
VC0310-4R7K	4.7	25	7.96	135	0.090	1400	Ferrite
VC0310-100K	10	20	7.96	50	0.220	1200	Ferrite
VC0410-R15M	0.15	70	25.2	480	0.018	1850	Ceramic
VC0410-R18M	0.18	70	25.2	450	0.022	1800	Ceramic
VC0410-R22M	0.22	70	25.2	400	0.025	1740	Ceramic
VC0410-R27M	0.27	70	25.2	380	0.029	1680	Ceramic
VC0410-R33M	0.33	70	25.2	300	0.032	1610	Ceramic
VC0410-R39M	0.39	70	25.2	280	0.035	1540	Ceramic
VC0410-R47M	0.47	70	25.2	260	0.039	1430	Ceramic
VC0410-R56M	0.56	70	25.2	210	0.049	1320	Ceramic
VC0410-R68M	0.68	70	25.2	190	0.078	1200	Ceramic
VC0410-R82M	0.82	70	25.2	180	0.090	1130	Ceramic
VC0410-1R0M	1.0	70	25.2	165	0.105	1020	Ceramic
VC0410-1R2K	1.2	55	79.6	150	0.063	1580	Ferrite
VC0410-1R5K	1.5	55	79.6	135	0.071	1500	Ferrite
VC0410-1R8K	1.8	55	79.6	125	0.078	1450	Ferrite
VC0410-2R2K	2.2	55	79.6	115	0.088	1380	Ferrite
VC0410-2R7K	2.7	55	79.6	105	0.098	1320	Ferrite
VC0410-3R3K	3.3	60	79.6	90	0.205	870	Ferrite
VC0410-3R9K	3.9	60	79.6	85	0.225	840	Ferrite
VC0410-4R7K	4.7	60	79.6	80	0.25	800	Ferrite
VC0410-5R6K	5.6	60	79.6	70	0.28	750	Ferrite
VC0410-6R8K	6.8	60	79.6	65	0.31	710	Ferrite
VC0410-8R2K	8.2	55	79.6	60	0.35	680	Ferrite
VC0410-100K	10	55	79.6	40	0.39	640	Ferrite
VC0410-120K	12	65	25.2	40	0.67	450	Ferrite
VC0410-150K	15	65	25.2	40	0.76	430	Ferrite
VC0410-180K	18	70	25.2	36	0.85	410	Ferrite
VC0410-220K	22	70	25.2	33	0.96	390	Ferrite
VC0410-270K	27	70	25.2	31	1.10	360	Ferrite
VC0410-330K	33	65	25.2	29	1.24	345	Ferrite
VC0410-390K	39	65	25.2	26	1.37	330	Ferrite
VC0410-470K	47	60	25.2	23	1.65	315	Ferrite
VC0410-560K	56	55	25.2	20	1.95	300	Ferrite



● **VC0513 series**

Part No.	L @1kHz (uH)	DCR (Ω) Max.	Temperature Rise Current (A) Max.
VC0513-3R9K-□□	3.9	0.019	1.28
VC0513-4R7K-□□	4.7	0.022	1.28
VC0513-5R6K-□□	5.6	0.024	1.28
VC0513-6R8K-□□	6.8	0.026	1.28
VC0513-8R2K-□□	8.2	0.028	1.28
VC0513-100K-□□	10	0.033	1.28
VC0513-120K-□□	12	0.037	1.28
VC0513-150K-□□	15	0.040	1.28
VC0513-180K-□□	18	0.044	1.28
VC0513-220K-□□	22	0.050	1.28
VC0513-270K-□□	27	0.058	1.28
VC0513-330K-□□	33	0.075	1.008
VC0513-390K-□□	39	0.094	0.804
VC0513-470K-□□	47	0.109	0.804
VC0513-560K-□□	56	0.140	0.804
VC0513-680K-□□	68	0.145	0.804
VC0513-820K-□□	82	0.152	0.804
VC0513-101K-□□	100	0.208	0.632
VC0513-121K-□□	120	0.283	0.508
VC0513-151K-□□	150	0.340	0.508
VC0513-181K-□□	180	0.362	0.508
VC0513-221K-□□	220	0.430	0.508
VC0513-271K-□□	270	0.557	0.400
VC0513-331K-□□	330	0.665	0.400
VC0513-391K-□□	390	0.772	0.400
VC0513-471K-□□	470	1.15	0.315
VC0513-561K-□□	560	1.27	0.315
VC0513-681K-□□	680	1.61	0.250
VC0513-821K-□□	820	1.96	0.200
VC0513-102K-□□	1000	2.30	0.200
VC0513-122K-□□	1200	2.65	0.200
VC0513-152K-□□	1500	3.45	0.158
VC0513-182K-□□	1800	4.03	0.158
VC0513-222K-□□	2200	4.48	0.158
VC0513-272K-□□	2700	5.90	0.125
VC0513-332K-□□	3300	6.56	0.125
VC0513-392K-□□	3900	8.63	0.100
VC0513-472K-□□	4700	10.5	0.100
VC0513-562K-□□	5600	13.9	0.082
VC0513-682K-□□	6800	16.3	0.082
VC0513-822K-□□	8200	20.8	0.065
VC0513-103K-□□	10000	26.4	0.050
VC0513-123K-□□	12000	29.2	0.050
VC0513-153K-□□	15000	42.5	0.039
VC0513-183K-□□	18000	48.3	0.031

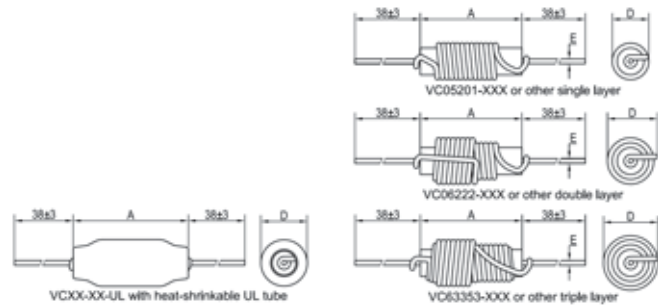


● **VC1019 series**

Part No.	L @1kHz (uH)	DCR (Ω) Max.	Temperature Rise Current (A)Max.
VC1019-3R9K-UL	3.9	0.007	4.0
VC1019-4R7K-UL	4.7	0.008	4.0
VC1019-6R8K-UL	6.8	0.011	4.0
VC1019-100K-UL	10	0.017	4.0
VC1019-150K-UL	15	0.022	4.0
VC1019-220K-UL	22	0.026	4.0
VC1019-270K-UL	27	0.027	4.0
VC1019-330K-UL	33	0.032	4.0
VC1019-390K-UL	39	0.033	4.0
VC1019-470K-UL	47	0.035	4.0
VC1019-560K-UL	56	0.037	3.2
VC1019-680K-UL	68	0.047	2.5
VC1019-820K-UL	82	0.060	2.0
VC1019-101K-UL	100	0.090	1.6
VC1019-121K-UL	120	0.113	1.6
VC1019-151K-UL	150	0.129	1.6
VC1019-181K-UL	180	0.150	1.6
VC1019-221K-UL	220	0.162	1.6
VC1019-271K-UL	270	0.208	1.6
VC1019-331K-UL	330	0.212	1.6
VC1019-391K-UL	390	0.281	1.6
VC1019-471K-UL	470	0.380	1.2
VC1019-561K-UL	560	0.420	1.0
VC1019-681K-UL	680	0.548	1.0
VC1019-821K-UL	820	0.655	0.8
VC1019-102K-UL	1000	0.844	0.8
VC1019-122K-UL	1200	1.04	0.6
VC1019-152K-UL	1500	1.18	0.6
VC1019-182K-UL	1800	1.56	0.6
VC1019-222K-UL	2200	2.00	0.5
VC1019-272K-UL	2700	2.06	0.4
VC1019-332K-UL	3300	2.53	0.4
VC1019-392K-UL	3900	2.75	0.4
VC1019-472K-UL	4700	3.19	0.4
VC1019-562K-UL	5600	3.92	0.315
VC1019-682K-UL	6800	5.69	0.250
VC1019-822K-UL	8200	6.32	0.250
VC1019-103K-UL	10000	7.30	0.250
VC1019-153K-UL	15000	10.5	0.200
VC1019-223K-UL	22000	21.8	0.125
VC1019-333K-UL	33000	25.7	0.125
VC1019-473K-UL	47000	36.1	0.100
VC1019-683K-UL	68000	57.3	0.082
VC1019-104K-UL	100000	89.7	0.065



VC SPECIAL DESIGN



Electrical Specification					Dimensions (Unit: mm)		
Part No.	L (uH) @1kHz ± 10%	I _{rms} (A) Max.	DCR (Ω) Max.	SRF (MHz) Min.	A Max.	D Max.	E ±0.05
VC05153-500K-1A-UL	50	1.0	0.120	4.0	20.32	12.06	0.80
VC05154-101K-1A-UL	100	1.0	0.180	2.0	20.32	12.06	0.80
VC06223-251K-1A-UL	250	1.0	0.300	1.0	26.67	12.06	0.80
VC06225-501K-1A-UL	500	1.0	0.500	0.8	26.67	13.97	0.80
VC06256-102K-1A-UL	1000	1.0	0.600	0.5	29.84	13.97	0.80
VC05152-270K-2A-UL	27	2.0	0.085	5.5	20.32	12.70	0.80
VC05153-500K-2A-UL	50	2.0	0.100	4.0	20.32	12.70	0.80
VC06223-101K-2A-UL	100	2.0	0.150	2.0	23.37	12.70	0.80
VC05205-251K-2A-UL	250	2.0	0.250	1.0	23.37	15.24	0.80
VC06226-501K-2A-UL	500	2.0	0.450	0.5	26.67	19.05	0.80
VC05152-5R0K-3A-UL	5	3.0	0.025	25	20.32	12.06	0.80
VC05202-100K-3A-UL	10	3.0	0.035	20	23.37	12.06	0.80
VC05153-270K-3A-UL	27	3.0	0.050	6.0	20.32	13.97	0.80
VC05203-500K-3A-UL	50	3.0	0.065	4.0	23.37	13.97	0.80
VC06253-101K-3A-UL	100	3.0	0.075	2.0	29.84	13.97	0.80
VC06221-5R0K-5A-UL	5	5.0	0.015	50	26.67	12.06	1.00
VC05202-100K-5A-UL	10	5.0	0.025	40	26.67	12.06	1.00
VC06222-270K-5A-UL	27	5.0	0.035	7.0	26.67	17.78	1.00
VC06223-500K-5A-UL	50	5.0	0.050	2.0	26.67	17.78	1.00
VC08303-101K-5A-UL	100	5.0	0.065	1.0	33.02	17.78	1.00
VC50201-100K	10	3.0	0.060		22.00	8.00	0.80
VC63351-400K	40	3.0	0.082		38.00	8.00	0.80
VC63352-680K	68	5.0	0.054		38.00	14.50	1.00
VC63352-101K	100	2.0	0.216		38.00	10.00	0.80
VC63353-121K	120	3.5	0.080		38.00	13.00	1.00
VC63353-251K	250	2.5	0.170		38.00	11.50	0.80
VC63353-501K	500	2.0	0.260		38.00	14.50	0.80
VC63353-102K	1,000	1.0	0.550		38.00	13.00	0.80

* 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.