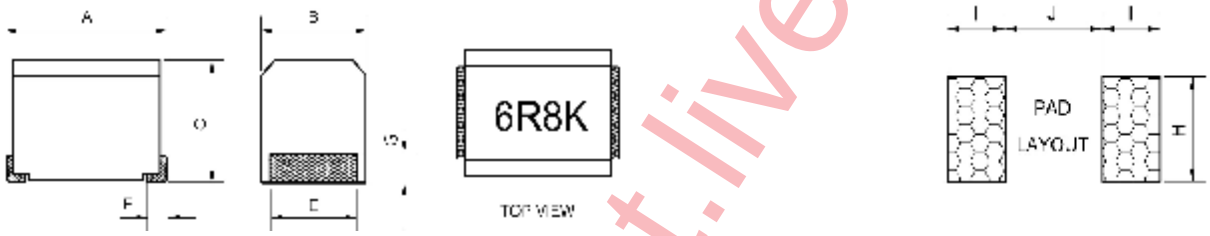
SMD SERIES

WIRE WOUND SMD CHIP INDUCTORS

Applications :

- Communication infrastructures Including xDSL and mobile base stations.
- Onboard automobile equipment Including car audio and ECU systems.
- Audio-visual equipment including TVs and VCRs.
- Other electronic equipment including HDDs and ODDs.

Shape and Dimensions (Dimensions are in mm) :



Item	A	B	C	E	F	G	H	I	J
4532V(P)	4.5±0.3	3.2±0.2	3.2±0.2	2.6±0.1	0.6±0.1	0.8	2.8	1.5	3.0
5650V	5.6±0.3	5.0±0.2	4.0±0.2	4.0±0.1	0.7±0.1	1.1	4.5	2.0	4.0
5650VL	5.6±0.3	5.0±0.2	3.0±0.2	4.0±0.1	0.7±0.1	1.1	4.5	2.0	4.0

Features :

- Wire wound SMD inductors .
- Highly accurate dimensions and reliable performance
- SMD4532VP / SMD5650V are low Rdc, higher current for the power supply line applications.
- SMD5650VL is low size type, the specification is similar as the Unshielder power inductors – SMTDR0402 type.
- Good heat durability that withstands lead-free compatible reflow soldering conditions.

Product identification :

SMD 4532 V P - 100 K

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

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

(2) Style : **L**=4.5 mm **W**=3.2mm **Ht**=3.2mm.

(3) "V": Vertical Structure.

(4) “P”: For Power Line. “L” : Low size.

(5) Inductance : **100** for **10** uH.

(6) Inductance tolerance: **J** : ±5%; **K** : ±10%; **M** : ±20%.

Characteristics :

. Rated Current: It is either the inductance is 25% lower is than its initial value in DC. saturation characteristics or temperature rise becomes △T=20℃(Ta=20) whichever lower.

. Operating temperature : -40℃ to 105℃ (Including self-temperature rise).

Test equipments :

. Inductance measured at 0Adc on HP 4284A LCR meter or equivalent.

. DCR measured on Chroma 16502 micro-Ωmeter or equivalent.

. Electrical specifications at 25℃.

www.datasheet.live

I SMD 4532V series

Part No.	Inductance		Q	Test Freq.	SRF (MHz)	DCR (Ω)	Rated Current
	(uH)	Tolerance	Min.	MHz	Min.	Max.	(mA) Max.
SMD4532V -R10□	0.10	M,K	35	25.2	300	0.18	800
SMD4532V -R12□	0.12	M,K	35	25.2	280	0.20	770
SMD4532V -R15□	0.15	M,K	35	25.2	250	0.22	730
SMD4532V -R18□	0.18	M,K	35	25.2	220	0.24	700
SMD4532V -R22□	0.22	M,K	40	25.2	200	0.25	665
SMD4532V -R27□	0.27	M,K	40	25.2	180	0.26	635
SMD4532V -R33□	0.33	M,K	40	25.2	165	0.28	605
SMD4532V -R39□	0.39	M,K	40	25.2	150	0.30	575
SMD4532V -R47□	0.47	M,K	40	25.2	145	0.32	545
SMD4532V -R56□	0.56	M,K	40	25.2	140	0.36	520
SMD4532V -R68□	0.68	M,K	40	25.2	135	0.40	500
SMD4532V -R82□	0.82	M,K	40	25.2	130	0.45	475
SMD4532V -1R0□	1.0	M,K	50	7.96	100	0.50	450
SMD4532V -1R2□	1.2	M,K	50	7.96	80	0.55	430
SMD4532V -1R5□	1.5	M,K	50	7.96	70	0.60	410
SMD4532V -1R8□	1.8	M,K	50	7.96	60	0.65	390
SMD4532V -2R2□	2.2	M,K	50	7.96	55	0.70	380
SMD4532V -2R7□	2.7	M,K	50	7.96	50	0.75	370
SMD4532V -3R3□	3.3	M,K	50	7.96	45	0.80	355
SMD4532V -3R9□	3.9	M,K	50	7.96	40	0.90	330
SMD4532V -4R7□	4.7	M,K	50	7.96	35	1.0	315
SMD4532V -5R6□	5.6	K,J	50	7.96	33	1.1	300
SMD4532V -6R8□	6.8	K,J	50	7.96	27	1.2	285
SMD4532V -8R2□	8.2	K,J	50	7.96	23	1.4	270
SMD4532V -100□	10	K,J	50	2.52	20	1.5	250
SMD4532V -120□	12	K,J	50	2.52	18	2.0	225
SMD4532V -150□	15	K,J	50	2.52	17	2.5	200
SMD4532V -180□	18	K,J	50	2.52	15	2.8	190
SMD4532V -220□	22	K,J	50	2.52	13	3.2	180
SMD4532V -270□	27	K,J	50	2.52	12	3.6	170
SMD4532V -330□	33	K,J	50	2.52	11	4.0	160
SMD4532V -390□	39	K,J	50	2.52	10	4.5	150
SMD4532V -470□	47	K,J	50	2.52	10	5.0	140
SMD4532V -560□	56	K,J	50	2.52	9.0	5.5	135
SMD4532V -680□	68	K,J	50	2.52	9.0	6.0	130
SMD4532V -820□	82	K,J	50	2.52	8.0	7.0	120
SMD4532V -101□	100	K,J	40	0.796	8.0	8.0	110
SMD4532V -121□	120	K,J	40	0.796	6.0	8.0	110
SMD4532V -151□	150	K,J	40	0.796	5.0	9.0	105
SMD4532V -181□	180	K,J	40	0.796	5.0	9.5	105
SMD4532V -221□	220	K,J	40	0.796	4.0	10	100
SMD4532V -271□	270	K,J	40	0.796	4.0	12	92
SMD4532V -331□	330	K,J	40	0.796	3.5	14	85
SMD4532V -391□	390	K,J	40	0.796	3.0	16	80

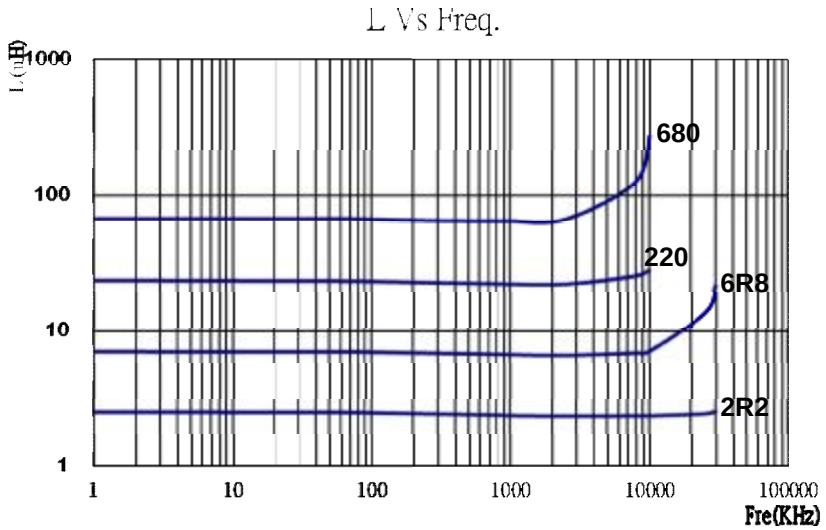
I SMD 5650V series

Part No.	Inductance		Q	Test Freq.	SRF (MHz)	DCR (Ω)	Rated Current
	(uH)	Tolerance	Min.	MHz	Min.	Max.	(mA) Max.
SMD5650V–1R0□	1.0	M,K	10	7.96	95	0.030	1800
SMD5650V–1R2□	1.2	M,K	10	7.96	70	0.035	1700
SMD5650V–1R5□	1.5	M,K	10	7.96	55	0.04	1600
SMD5650V–1R8□	1.8	M,K	10	7.96	47	0.05	1400
SMD5650V–2R2□	2.2	M,K	10	7.96	42	0.06	1300
SMD5650V–2R7□	2.7	M,K	10	7.96	37	0.07	1200
SMD5650V–3R3□	3.3	M,K	10	7.96	34	0.08	1120
SMD5650V–3R9□	3.9	M,K	10	7.96	32	0.09	1050
SMD5650V–4R7□	4.7	M,K	10	7.96	29	0.11	950
SMD5650V–5R6□	5.6	M,K	10	7.96	26	0.13	880
SMD5650V–6R8□	6.8	M,K	10	7.96	24	0.15	810
SMD5650V–8R2□	8.2	M,K	10	7.96	22	0.18	750
SMD5650V–100□	10	M,K	10	2.52	19	0.21	690
SMD5650V–120□	12	M,K	10	2.52	17	0.25	630
SMD5650V–150□	15	M,K	10	2.52	16	0.30	580
SMD5650V–180□	18	M,K	10	2.52	14	0.36	530
SMD5650V–220□	22	K,J	10	2.52	13	0.43	480
SMD5650V–270□	27	K,J	10	2.52	11.5	0.52	440
SMD5650V–330□	33	K,J	10	2.52	10.5	0.62	400
SMD5650V–390□	39	K,J	10	2.52	9.5	0.72	370
SMD5650V–470□	47	K,J	10	2.52	8.5	0.85	340
SMD5650V–560□	56	K,J	10	2.52	7.8	1.0	310
SMD5650V–680□	68	K,J	10	2.52	7.0	1.2	290
SMD5650V–820□	82	K,J	10	2.52	6.4	1.4	270
SMD5650V–101□	100	K,J	20	0.796	6.0	1.6	250
SMD5650V–121□	120	K,J	20	0.796	5.4	1.9	230
SMD5650V–151□	150	K,J	20	0.796	4.8	2.2	210
SMD5650V–181□	180	K,J	20	0.796	4.4	2.8	190
SMD5650V–221□	220	K,J	20	0.796	3.9	3.4	170
SMD5650V–271□	270	K,J	20	0.796	3.6	4.2	155
SMD5650V–331□	330	K,J	20	0.796	3.2	4.9	140
SMD5650V–391□	390	K,J	20	0.796	2.9	5.8	130
SMD5650V–471□	470	K,J	20	0.796	2.6	7.0	120
SMD5650V–561□	560	K,J	20	0.796	2.4	8.5	110
SMD5650V–681□	680	K,J	20	0.796	2.2	10	100
SMD5650V–821□	820	K,J	20	0.796	2.0	13	90
SMD5650V–102□	1000	K,J	20	0.252	1.8	15	85
SMD5650V–122□	1200	K,J	20	0.252	1.5	17	75
SMD5650V–152□	1500	K,J	20	0.252	1.4	20	70
SMD5650V–182□	1800	K,J	20	0.252	1.3	30	60
SMD5650V–222□	2200	K,J	20	0.252	1.2	35	55
SMD5650V–272□	2700	K,J	20	0.252	1.1	55	45
SMD5650V–332□	3300	K,J	20	0.252	1.0	60	40
SMD5650V–392□	3900	K,J	20	0.252	1.0	70	38
SMD5650V–472□	4700	K,J	20	0.252	0.9	78	36

I SMD 5650V series

Part No.	Inductance		Q	Test Freq.	SRF (MHz)	DCR (Ω)	Rated Current
	(uH)	Tolerance	Min.	MHz	Min.	Max.	(mA) Max.
SMD5650V–562□	5600	K,J	20	0.252	0.8	85	33
SMD5650V–682□	6800	K,J	20	0.252	0.7	110	30
SMD5650V–822□	8200	K,J	20	0.252	0.6	125	28
SMD5650V–103□	10000	K,J	15	0.0796	0.5	150	25

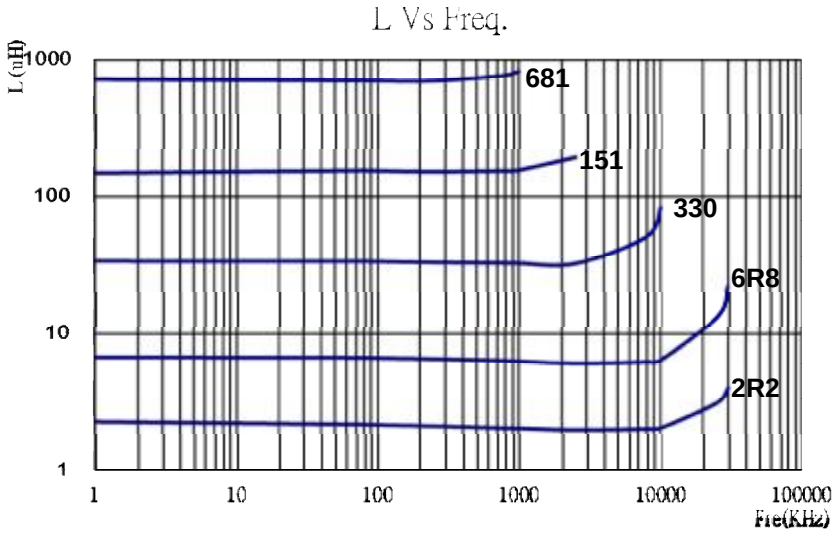
Typical performance curves :



I SMD 5650VL series

Part No.	Inductance		Q	Test Freq.	SRF (MHz)	DCR (Ω)	Rated Current
	(uH)	Tolerance	Min.	MHz	Min.	Max.	(mA) Max.
SMD5650VL–1R0□	1.0	M,K	10	0.10	130	0.05	2900
SMD5650VL–1R5□	1.5	M,K	10	0.10	115	0.05	2600
SMD5650VL–2R2□	2.2	M,K	10	0.10	90	0.07	2300
SMD5650VL–3R3□	3.3	M,K	10	0.10	70	0.08	2000
SMD5650VL–4R7□	4.7	M,K	10	0.10	50	0.09	1500
SMD5650VL–6R8□	6.8	M,K	10	0.100	45	0.13	1200
SMD5650VL–100□	10	M,K	10	0.10	35	0.16	1100
SMD5650VL–150□	15	M,K	10	0.10	30	0.23	900
SMD5650VL–220□	22	M,K	10	0.10	20	0.37	700
SMD5650VL–330□	33	M,K	10	0.10	15	0.51	580
SMD5650VL–470□	47	M,K	10	0.10	14	0.64	500
SMD5650VL–680□	68	M,K	10	0.10	11	0.86	400
SMD5650VL–101□	100	K,J	10	0.10	9.0	1.27	300
SMD5650VL–151□	150	K,J	10	0.10	6.0	2.00	250
SMD5650VL–221□	220	K,J	10	0.10	5.5	3.11	200
SMD5650VL–331□	330	K,J	10	0.10	5.0	3.80	160
SMD5650VL–471□	470	K,J	10	0.10	4.0	6.20	150
SMD5650VL–681□	680	K,J	10	0.10	3.0	9.20	120
SMD5650VL–102□	1000	K,J	10	0.10	2.0	13.8	70

Typical performance curves :



* 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.