



## SMD Wire Wound Ferrite Chip Inductors - LQH Series

### LQH Series



LQH Series comes in 2 sizes with wide inductance range, high Q value at high frequencies and low DC resistance.

#### Features

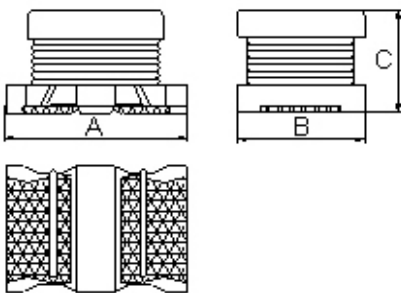
- RoHS compliant
- Miniature chip inductors wound on a special ferrite core
- High Q value at high frequencies and low DC resistance
- Wide inductance range
- Excellent solder heat resistance
- Both flow and reflow soldering methods can be employed

#### Applications

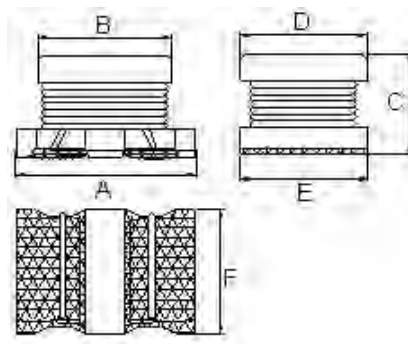
- Personal, cordless phone
- High Freq. communication products
- GPS (global position system)
- Personal computers

### Shape and Dimensions

#### LQH3225



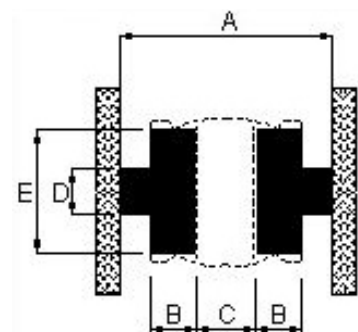
#### LQH4532



Dimensions in mm

TYPE	A	B	C	D	E	F
LQH3225	3.2±0.3	2.5±0.2	2.0±0.2	-	-	-
LQH4532	4.5±0.3	3.6±0.2	2.6±0.2	3.2±0.2	3.2±0.2	3.2±0.2

### Recommended Pattern



Dimensions in mm

TYPE	A	B	C	D	E
LQH3225	5.5	1.0	1.3	1.0	2.0
LQH4532	7.5	1.5	1.5	1.5	3.0



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### Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	Q Min	Test Frequency (MHz)	SRF (MHz) Min	RDC (Ω) Max	Rated current (mA)
LQH3225-R47□	0.47	20	1	20	1	150	0.06	1100
LQH3225-R82□	0.82	20	1	20	1	120	0.25	450
LQH3225-1R0□	1.0	20	1	20	1	100	0.50	445
LQH3225-1R2□	1.2	20	1	20	1	100	0.60	425
LQH3225-1R5□	1.5	20 / 10	1	20	1	75	0.60	400
LQH3225-1R8□	1.8	20 / 10	1	20	1	60	0.70	390
LQH3225-2R2□	2.2	20 / 10	1	20	1	50	0.80	370
LQH3225-2R7□	2.7	20 / 10	1	20	1	43	0.90	320
LQH3225-3R3□	3.3	20 / 10	1	20	1	38	1.0	300
LQH3225-3R9□	3.9	20 / 10	1	20	1	35	1.1	290
LQH3225-4R7□	4.7	20 / 10	1	20	1	31	1.2	270
LQH3225-5R6□	5.6	20 / 10	1	20	1	28	1.3	250
LQH3225-6R8□	6.8	20 / 10	1	20	1	25	1.5	240
LQH3225-8R2□	8.2	20 / 10	1	20	1	23	1.6	225
LQH3225-100□	10	20 / 10	1	35	1	20	1.8	190
LQH3225-120□	12	20 / 10	1	35	1	18	2.0	180
LQH3225-150□	15	20 / 10	1	35	1	16	2.2	170
LQH3225-180□	18	20 / 10	1	35	1	15	2.5	165
LQH3225-220□	22	20 / 10 / 5	1	35	1	14	2.8	150
LQH3225-270□	27	20 / 10	1	35	1	13	3.1	125
LQH3225-330□	33	20 / 10	1	40	1	12	3.5	115
LQH3225-390□	39	20 / 10	1	40	1	11	3.9	110
LQH3225-470□	47	20 / 10	1	40	1	11	4.3	100
LQH3225-560□	56	20 / 10	1	40	1	10.0	4.9	85
LQH3225-680□	68	20 / 10	1	40	1	9.0	5.5	80
LQH3225-820□	82	20 / 10 / 5	1	40	1	8.5	6.2	70
LQH3225-101□	100	20 / 10 / 5	1	40	0.796	8.0	7.0	80
LQH3225-121□	120	20 / 10	1	40	0.796	7.5	8.0	75
LQH3225-151□	150	20 / 10	1	40	0.796	7.0	9.3	70
LQH3225-181□	180	20 / 10	1	40	0.796	6.0	10.2	65
LQH3225-221□	220	20 / 10	1	40	0.796	5.5	11.8	65
LQH3225-271□	270	20 / 10	1	40	0.796	5.0	12.5	65
LQH3225-331□	330	20 / 10	1	40	0.796	5.0	13.0	65
LQH3225-391□	390	20 / 10	1	50	0.796	5.0	22.0	50
LQH3225-471□	470	20 / 10	0.001	50	0.796	5.0	25.0	45
LQH3225-561□	560	20 / 10 / 5	0.001	50	0.796	2.0	28.0	40

**Note: When ordering, please specify tolerance code. Tolerance : J=±5% , K=±10% , M=±20%**

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Rated Current : Self temperature rise shall be limited to 35°C Max Inductance drop 10% typ.
- Measure Equipment :
  - L : Agilent HP4285A(1MHz)/Agilent HP4192A(1kHz)
  - Q : Agilent HP4285A
  - SRF : Agilent HP4286A
  - RDC : HP4338B or CHEN HWA 502
  - Rated Current : HP4284A+HP42841A



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Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (MHz)	Q Min	Test Frequency (MHz)	SRF (MHz) Min	RDC (Ω) Max	Rated current (mA)
LQH4532-1R0□	1.0	20	1	20	1	120	0.20	500
LQH4532-1R2□	1.2	20	1	20	1	100	0.20	500
LQH4532-1R5□	1.5	20	1	20	1	85	0.30	500
LQH4532-1R8□	1.8	20	1	20	1	75	0.30	500
LQH4532-2R2□	2.2	20	1	20	1	62	0.30	500
LQH4532-2R7□	2.7	20	1	20	1	53	0.32	500
LQH4532-3R3□	3.3	20	1	20	1	47	0.35	500
LQH4532-3R9□	3.9	20	1	20	1	41	0.38	500
LQH4532-4R7□	4.7	20 / 10	1	30	1	38	0.40	500
LQH4532-5R6□	5.6	20 / 10	1	30	1	33	0.47	500
LQH4532-6R8□	6.8	20 / 10	1	30	1	31	0.50	450
LQH4532-8R2□	8.2	20 / 10	1	30	1	27	0.56	450
LQH4532-100□	10	20 / 10	1	35	1	23	0.56	400
LQH4532-120□	12	20 / 10	1	35	1	21	0.62	380
LQH4532-150□	15	20 / 10 / 5	1	35	1	19	0.73	360
LQH4532-180□	18	20 / 10	1	35	1	17	0.82	340
LQH4532-220□	22	20 / 10 / 5	1	35	1	15	0.94	320
LQH4532-270□	27	20 / 10 / 5	1	35	1	14	1.1	300
LQH4532-330□	33	20 / 10	1	35	1	12	1.2	270
LQH4532-390□	39	20 / 10 / 5	1	35	1	11	1.4	240
LQH4532-470□	47	20 / 10 / 5	1	35	1	10	1.5	220
LQH4532-560□	56	20 / 10	1	35	1	9.3	1.7	200
LQH4532-680□	68	20 / 10 / 5	1	35	1	8.4	1.9	180
LQH4532-820□	82	20 / 10	1	35	1	7.5	2.2	170
LQH4532-101□	100	20 / 10 / 5	1	40	0.796	6.8	2.5	160
LQH4532-121□	120	20 / 10	1	40	0.796	6.2	3.0	150
LQH4532-151□	150	20 / 10	1	40	0.796	5.5	3.7	130
LQH4532-181□	180	20 / 10	1	40	0.796	5.0	4.5	120
LQH4532-221□	220	20 / 10 / 5	1	40	0.796	4.5	5.4	110
LQH4532-271□	270	20 / 10	1	40	0.796	4.0	6.8	100
LQH4532-331□	330	20 / 10	1	40	0.796	3.6	8.2	95
LQH4532-391□	390	20 / 10 / 5	1	40	0.796	3.3	9.7	90
LQH4532-471□	470	20 / 10 / 5	0.001	40	0.796	3.0	11.8	80
LQH4532-561□	560	20 / 10 / 5	0.001	40	0.796	2.7	14.5	70
LQH4532-681□	680	20 / 10	0.001	40	0.796	2.5	17.5	65
LQH4532-821□	820	20 / 10	0.001	40	0.796	2.2	20.5	60
LQH4532-102□	1000	20 / 10 / 5	0.001	40	0.252	2.0	25.0	50
LQH4532-122□	1200	20 / 10	0.001	40	0.252	1.8	30.0	45
LQH4532-152□	1500	20 / 10	0.001	40	0.252	1.6	37.0	40
LQH4532-182□	1800	20 / 10	0.001	40	0.252	1.5	45.0	35
LQH4532-222□	2200	20 / 10 / 5	0.001	40	0.252	1.3	50.0	30

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  - Q : Agilent HP4285A
  - SRF : Agilent HP4291A
  - RDC : HP4338B or CHEN HWA 502
  - Rated Current : HP4284A+HP42841A