

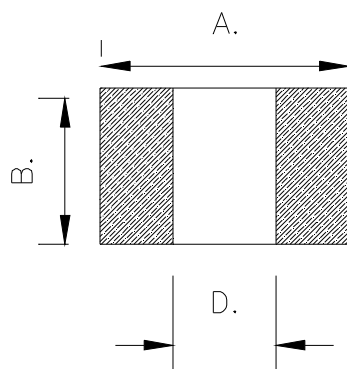
# SMD POWER INDUCTORS

## LQH Series TYPE

### CONFIGURATIONS & DIMENSIONS



TOP VIEW



UNIT:mm

MODEL NAME	A	B	C	D
LQH31-***	$3.2 \pm 0.3$	$1.6 \pm 0.2$	$1.8 \pm 0.2$	0.7 MIN.
LQH32-***	$3.2 \pm 0.3$	$2.5 \pm 0.2$	$2.0 \pm 0.2$	1.0 MIN.
LQH43-***	$4.5 \pm 0.3$	$3.2 \pm 0.2$	$2.6 \pm 0.2$	1.0 MIN.
LQH55-***	$5.7 \pm 0.3$	$5.0 \pm 0.3$	$4.7 \pm 0.3$	1.7 MIN.

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UNIVERSAL MICROELECTRONICS CO.,LTD.  
TEL:886-4-23590096 FAX:886-4-23590129

3,27TH RD.,TAICHUNG INDUSTRIAL PARK,  
TAICHUNG,TAIWAN,R.O.C

# SMD POWER INDUCTORS

## LQH Series TYPE

- High Q value at high frequencies
- Low DC. resistance
- Operating Temperature : -25°C~+85°C

### ELECTRICAL SPECIFICATION @25°C

UMEC Model Number	L(uH) Inductance	L Test Frequency	Q MIN	Q Test Frequency	DCR( $\Omega$ ) MAX	SRF(MHz) MIN	IDC(mA) MAX
<b>LQH31 TYPE</b>							
LQH31-1R0	1.0±10%	1MHz	15	10MHz	0.49	100	175
LQH31-1R2	1.2±10%	1MHz	15	10MHz	0.55	90	165
LQH31-1R5	1.5±10%	1MHz	15	10MHz	0.61	75	155
LQH31-1R8	1.8±10%	1MHz	15	10MHz	0.7	60	150
LQH31-2R2	2.2±10%	1MHz	15	10MHz	0.9	50	140
LQH31-2R7	2.7±10%	1MHz	15	10MHz	1.0	43	135
LQH31-3R3	3.3±10%	1MHz	15	8MHz	1.5	38	130
LQH31-3R9	3.9±10%	1MHz	15	8MHz	1.6	35	125
LQH31-4R7	4.7±10%	1MHz	15	8MHz	1.7	31	120
LQH31-5R6	5.6±10%	1MHz	15	8MHz	1.8	28	115
LQH31-6R8	6.8±10%	1MHz	15	8MHz	2.0	25	110
LQH31-8R2	8.2±10%	1MHz	20	8MHz	2.2	23	105
LQH31-100	10±10%	1MHz	20	5MHz	2.5	20	100
LQH31-120	12±10%	1MHz	20	5MHz	2.7	18	95
LQH31-150	15±10%	1MHz	20	5MHz	3.0	16	90
LQH31-180	18±10%	1MHz	20	5MHz	3.1	15	85
LQH31-220	22±10%	1MHz	20	2.5MHz	3.2	14	85
LQH31-270	27±10%	1MHz	25	2.5MHz	3.4	13	85
LQH31-330	33±10%	1MHz	25	2.5MHz	3.8	12	80
LQH31-390	39±10%	1MHz	25	2.5MHz	7.2	11	55
LQH31-470	47±10%	1MHz	30	2.5MHz	8.0	10	55
LQH31-560	56±10%	1MHz	30	2.5MHz	8.9	9.0	50
LQH31-680	68±10%	1MHz	30	2.5MHz	9.9	8.5	50
LQH31-820	82±10%	1MHz	30	2.5MHz	11	7.5	45
LQH31-101	100±10%	1MHz	30	2.5MHz	12	7.0	45

#### \*INDUCTANCE & RATING CURRENT

Measuring Frequency: 1MHz

\*The inductance is 10% lower than its initial value at rating DC current when at  $\Delta t=40^{\circ}\text{C}$  whichever is lower.

(hp 4284A Precision LCR METER & hp 4192A LF IMPEDANCE ANALYZER & hp 42841A BIAS CURRENT SOURCE)

\*D.C.Resistance (hp 34401A MULTIMETER)



Note: For RoHS compliant products, the Ordering Code: TG-Model No. ex: TG-LQH31-1R0

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# SMD POWER INDUCTORS

## LQH Series TYPE

- High Q value at high frequencies
- Low DC. resistance
- Operating Temperature : -25°C~+85°C

### ELECTRICAL SPECIFICATION @25°C

UMEC MODEL NUMBER	INDUCTANCE(uH)	Q MIN	SRF(MHz) MIN	D.C.R(Ω) REF.	RATING CURRENT(mA)
<b>LQH32 TYPE</b>					
LQH32-R10	0.10±20%	20@25.2MHz	200	0.25	700
LQH32-R18	0.18±20%	20@25.2MHz	200	0.25	650
LQH32-R27	0.27±20%	25@25.2MHz	200	0.25	600
LQH32-R39	0.39±20%	25@25.2MHz	200	0.25	530
LQH32-R56	0.56±20%	30@25.2MHz	160	0.25	530
LQH32-R68	0.68±20%	30@25.2MHz	160	0.25	470
LQH32-R82	0.82±20%	30@25.2MHz	120	0.25	450
LQH32-1R0	1.0±20%	20@ 1MHz	100	0.5	445
LQH32-1R2	1.2±20%	20@ 1MHz	100	0.6	425
LQH32-1R5	1.5±10%	20@ 1MHz	75	0.6	400
LQH32-1R8	1.8±10%	20@ 1MHz	60	0.7	390
LQH32-2R2	2.2±10%	20@ 1MHz	50	0.8	370
LQH32-2R7	2.7±10%	20@ 1MHz	43	0.9	320
LQH32-3R3	3.3±10%	20@ 1MHz	38	1.0	300
LQH32-3R9	3.9±10%	20@ 1MHz	35	1.1	290
LQH32-4R7	4.7±10%	20@ 1MHz	31	1.2	270
LQH32-5R6	5.6±10%	20@ 1MHz	28	1.3	250
LQH32-6R8	6.8±10%	20@ 1MHz	25	1.5	240
LQH32-8R2	8.2±10%	20@ 1MHz	23	1.6	225
LQH32-100	10±10%	35@ 1MHz	20	1.8	190
LQH32-120	12±10%	35@ 1MHz	18	2.0	180
LQH32-150	15±10%	35@ 1MHz	16	2.2	170
LQH32-180	18±10%	35@ 1MHz	15	2.5	165
LQH32-220	22±10%	35@ 1MHz	14	2.8	150
LQH32-270	27±10%	35@ 1MHz	13	3.1	125
LQH32-330	33±10%	40@ 1MHz	12	3.5	115
LQH32-390	39±10%	40@ 1MHz	11	3.9	110
LQH32-470	47±10%	40@ 1MHz	11	4.3	100
LQH32-560	56±10%	40@ 1MHz	10	4.9	85
LQH32-680	68±10%	40@ 1MHz	9.0	5.5	80
LQH32-820	82±10%	40@ 1MHz	8.5	6.2	70
LQH32-101	100±10%	40@ 796kHz	8.0	7.0	80
LQH32-121	120±10%	40@ 796kHz	7.5	8.0	75
LQH32-151	150±10%	40@ 796kHz	7.0	9.3	70
LQH32-181	180±10%	40@ 796kHz	6.0	10.2	65
LQH32-221	220±10%	40@ 796kHz	5.5	11.8	65
LQH32-271	270±10%	40@ 796kHz	5.0	12.5	65
LQH32-331	330±10%	40@ 796kHz	5.0	13.0	65
LQH32-391	390±10%	50@ 796kHz	5.0	22.0	50
LQH32-471	470±10%	50@ 796kHz	5.0	25.0	45
LQH32-561	560±10%	50@ 796kHz	5.0	28.0	40

**\*INDUCTANCE & RATING CURRENT**

Measuring Frequency: 1MHz

\*The inductance is 10% lower than its initial value at rating DC current when at Δt=40°C whichever is lower.

(hp 4284A Precision LCR METER & hp 4192A LF IMPEDANCE ANALYZER & hp 42841A BIAS CURRENT SOURCE)

\*D.C.Resistance (hp 34401A MULTIMETER)



Note: For RoHS compliant products, the Ordering Code: TG-Model No. ex: TG-LQH32-R10

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# SMD POWER INDUCTORS

## LQH Series TYPE

- High Q value at high frequencies
- Low DC. resistance
- Operating Temperature : -25<sup>0</sup>C~+85<sup>0</sup>C

### ELECTRICAL SPECIFICATION @25<sup>0</sup>C

UMEC Model Number	L(uH) Inductance	L Test Frequency	Q MIN	Q Test Frequency	DCR( $\Omega$ ) MAX	SRF(MHz) MIN	IDC(mA) MAX
<b>LQH43 TYPE</b>							
LQH43-1R0	1.0 $\pm$ 20%	1MHz	20	1MHz	0.20	120	500
LQH43-1R2	1.2 $\pm$ 20%	1MHz	20	1MHz	0.20	100	500
LQH43-1R5	1.5 $\pm$ 20%	1MHz	20	1MHz	0.30	85	500
LQH43-1R8	1.8 $\pm$ 20%	1MHz	20	1MHz	0.30	75	500
LQH43-2R2	2.2 $\pm$ 20%	1MHz	20	1MHz	0.30	62	500
LQH43-2R7	2.7 $\pm$ 20%	1MHz	20	1MHz	0.32	53	500
LQH43-3R3	3.3 $\pm$ 20%	1MHz	20	1MHz	0.35	47	500
LQH43-3R9	3.9 $\pm$ 20%	1MHz	20	1MHz	0.38	41	500
LQH43-4R7	4.7 $\pm$ 10%	1MHz	30	1MHz	0.40	38	500
LQH43-5R6	5.6 $\pm$ 10%	1MHz	30	1MHz	0.47	33	500
LQH43-6R8	6.8 $\pm$ 10%	1MHz	30	1MHz	0.50	31	450
LQH43-8R2	8.2 $\pm$ 10%	1MHz	30	1MHz	0.56	27	450
LQH43-100	10 $\pm$ 10%	1MHz	35	1MHz	0.56	23	400
LQH43-120	12 $\pm$ 10%	1MHz	35	1MHz	0.62	21	380
LQH43-150	15 $\pm$ 10%	1MHz	35	1MHz	0.73	19	360
LQH43-180	18 $\pm$ 10%	1MHz	35	1MHz	0.82	17	340
LQH43-220	22 $\pm$ 10%	1MHz	35	1MHz	0.94	15	320
LQH43-270	27 $\pm$ 10%	1MHz	35	1MHz	1.1	14	300
LQH43-330	33 $\pm$ 10%	1MHz	35	1MHz	1.2	12	270
LQH43-390	39 $\pm$ 10%	1MHz	35	1MHz	1.4	11	240
LQH43-470	47 $\pm$ 10%	1MHz	35	1MHz	1.5	10	220
LQH43-560	56 $\pm$ 10%	1MHz	35	1MHz	1.7	9.3	200
LQH43-680	68 $\pm$ 10%	1MHz	35	1MHz	1.9	8.4	180
LQH43-820	82 $\pm$ 10%	1MHz	35	1MHz	2.2	7.5	170
LQH43-101	100 $\pm$ 10%	1MHz	40	796KHz	2.5	6.8	160
LQH43-121	120 $\pm$ 10%	1MHz	40	796KHz	3.0	6.2	150
LQH43-151	150 $\pm$ 10%	1MHz	40	796KHz	3.7	5.5	130
LQH43-181	180 $\pm$ 10%	1MHz	40	796KHz	4.5	5.0	120
LQH43-221	220 $\pm$ 10%	1MHz	40	796KHz	5.4	4.5	110
LQH43-271	270 $\pm$ 10%	1MHz	40	796KHz	6.8	4.0	100
LQH43-331	330 $\pm$ 10%	1MHz	40	796KHz	8.2	3.6	95
LQH43-391	390 $\pm$ 10%	1MHz	40	796KHz	9.7	3.3	90
LQH43-471	470 $\pm$ 10%	1KHz	40	796KHz	11.8	3.0	80
LQH43-561	560 $\pm$ 10%	1KHz	40	796KHz	14.5	2.7	70
LQH43-681	680 $\pm$ 10%	1KHz	40	796KHz	17.0	2.5	65
LQH43-821	820 $\pm$ 10%	1KHz	40	796KHz	20.5	2.2	60
LQH43-102	1000 $\pm$ 10%	1KHz	40	252KHz	25.0	2.0	50
LQH43-122	1200 $\pm$ 10%	1KHz	40	252KHz	30.0	1.8	45
LQH43-152	1500 $\pm$ 10%	1KHz	40	252KHz	37.0	1.6	40
LQH43-182	1800 $\pm$ 10%	1KHz	40	252KHz	45.0	1.5	35
LQH43-222	2200 $\pm$ 10%	1KHz	40	252KHz	50.0	1.3	30

#### \*INDUCTANCE & RATING CURRENT

Measuring Frequency: 1MHz

\*The inductance is 10% lower than its initial value at rating DC current when at  $\Delta t=40^{\circ}\text{C}$  whichever is lower.

(hp 4284A Precision LCR METER & hp 4192A LF IMPEDANCE ANALYZER & hp 42841A BIAS CURRENT SOURCE)

\*D.C.Resistance (hp 34401A MULTIMETER)



Note: For RoHS compliant products, the Ordering Code: TG-Model No. ex: TG-LQH43-1R0

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# SMD POWER INDUCTORS

## LQH Series TYPE

- High Q value at high frequencies
- Low DC. resistance
- Operating Temperature : -25°C~+85°C

### ELECTRICAL SPECIFICATION @25°C

UMEC Model Number	L (uH) Inductance	L Test Frequency	DCR( $\Omega$ ) MAX	SRF(MHz) MIN	IDC(mA) MAX
<b>LQH55 TYPE</b>					
LQH55-R12	0.12±20%	1MHz	0.007	450	6000
LQH55-R27	0.27±20%	1MHz	0.010	300	5300
LQH55-R47	0.47±20%	1MHz	0.013	200	4800
LQH55-1R0	1.0±20%	1MHz	0.019	150	4000
LQH55-1R5	1.5±20%	1MHz	0.022	110	3700
LQH55-2R2	2.2±20%	1MHz	0.029	80	3200
LQH55-3R3	3.3±20%	1MHz	0.036	40	2900
LQH55-4R7	4.7±20%	1MHz	0.041	30	2700
LQH55-6R8	6.8±20%	1MHz	0.074	25	2000
LQH55-100	10±20%	1MHz	0.093	20	1700
LQH55-150	15±20%	1MHz	0.15	17	1400
LQH55-220	22±20%	1MHz	0.19	15	1200
LQH55-330	33±20%	1MHz	0.32	12	900
LQH55-470	47±20%	1MHz	0.40	10	800
LQH55-680	68±20%	1MHz	0.67	7.6	640
LQH55-101	100±20%	100KHz	0.86	6.5	560
LQH55-151	150±20%	100KHz	1.9	5.0	420
LQH55-221	220±20%	100KHz	2.4	4.0	320
LQH55-331	330±20%	100KHz	4.4	3.1	270
LQH55-471	470±20%	100KHz	5.4	2.4	240
LQH55-681	680±20%	100KHz	8.1	1.9	190
LQH55-102	1000±20%	100KHz	10.3	1.7	150
LQH55-222	2200±20%	100KHz	21.5	1.2	100
LQH55-472	4700±20%	100KHz	43.6	0.8	70
LQH55-103	10000±20%	100KHz	100	0.5	50

#### \*INDUCTANCE & RATING CURRENT

Measuring Frequency: 1MHz

\*The inductance is 10% lower than its initial value at rating DC current when at  $\Delta t=40^{\circ}\text{C}$  whichever is lower.

(hp 4284A Precision LCR METER & hp 4192A LF IMPEDANCE ANALYZER & hp 42841A BIAS CURRENT SOURCE)

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Note: For RoHS compliant products, the Ordering Code: TG-Model No. ex: TG-LQH55-R12

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