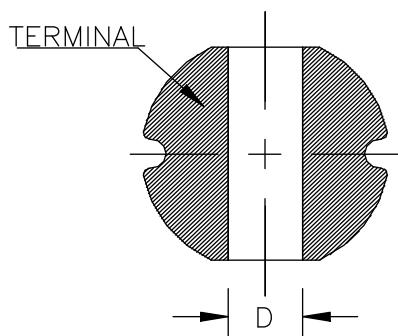
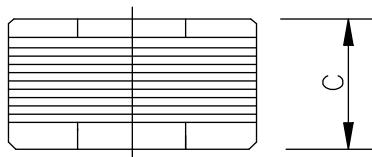
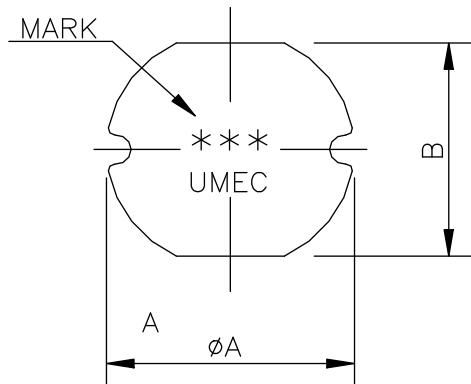


SMD POWER INDUCTORS

LS TYPE

CONFIGURATIONS & DIMENSIONS



UNIT:mm

| PART NAME | A | B | C | D |
|-----------|----------|---------|---------|----------|
| LS43-*** | 4.5±0.3 | 4.0±0.3 | 3.2±0.3 | 1.0 TYP. |
| LS54-*** | 5.8±0.3 | 5.2±0.3 | 4.5±0.4 | 1.3 TYP. |
| LS73-*** | 7.8±0.3 | 7.0±0.3 | 3.5±0.5 | 2.1 TYP. |
| LS75-*** | 7.8±0.3 | 7.0±0.3 | 5.0±0.5 | 2.1 TYP. |
| LS104-*** | 10.0±0.3 | 9.0±0.3 | 4.0±0.5 | 2.9 TYP. |
| LS105-*** | 10.0±0.3 | 9.0±0.3 | 5.4±0.4 | 2.9 TYP. |

DATA SHEET 02-30 NOV./99

1 OF 5



UNIVERSAL MICROELECTRONICS CO., LTD.
TEL:886-4-3590096 FAX:886-4-3590129

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

SMD POWER INDUCTORS

- » VIThese are high power SMD inductors and superior to high saturation.
- » VIItape and Reel package.
- » VIOperation Temperature : -30°C~+100°C
- » VIContain Heating Coil)Over 100MΩ at 100V.D.C. between coil and core.
- » VINO dielectric breakdown at 100V.D.C. for 1 minute between coil and core.

ELECTRICAL SPECIFICATION @25°C

| UMEC PART NUMBER | MARK | INDUCTANCE(uH) | D.C.R(Ω) MAX. | RATING CURRENT(A) |
|---------------------|------|----------------|------------------|----------------------|
| LS43 TYPE | | | | |
| LS43-1R0 | 1R0 | 1.0±20% | 0.049 | 2.56 |
| LS43-1R4 | 1R4 | 1.4±20% | 0.056 | 2.52 |
| LS43-1R8 | 1R8 | 1.8±20% | 0.064 | 1.95 |
| LS43-2R2 | 2R2 | 2.2±20% | 0.071 | 1.75 |
| LS43-2R7 | 2R7 | 2.7±20% | 0.079 | 1.58 |
| LS43-3R3 | 3R3 | 3.3±20% | 0.086 | 1.44 |
| LS43-3R9 | 3R9 | 3.9±20% | 0.094 | 1.33 |
| LS43-4R7 | 4R7 | 4.7±20% | 0.11 | 1.15 |
| LS43-5R6 | 5R6 | 5.6±20% | 0.13 | 0.99 |
| LS43-6R8 | 6R8 | 6.8±20% | 0.13 | 0.95 |
| LS43-8R2 | 8R2 | 8.2±20% | 0.15 | 0.84 |
| LS43-100 | 100 | 10±20% | 0.18 | 1.04 |
| LS43-120 | 120 | 12±20% | 0.21 | 0.97 |
| LS43-150 | 150 | 15±20% | 0.24 | 0.85 |
| LS43-180 | 180 | 18±20% | 0.34 | 0.74 |
| LS43-220 | 220 | 22±20% | 0.38 | 0.68 |
| LS43-270 | 270 | 27±20% | 0.52 | 0.62 |
| LS43-330 | 330 | 33±10% | 0.54 | 0.56 |
| LS43-390 | 390 | 39±10% | 0.59 | 0.52 |
| LS43-470 | 470 | 47±10% | 0.84 | 0.44 |
| LS43-560 | 560 | 56±10% | 0.94 | 0.42 |
| LS43-680 | 680 | 68±10% | 1.12 | 0.37 |
| LS54 TYPE | | | | |
| LS54-100 | 100 | 10±20% | 0.10 | 1.44 |
| LS54-120 | 120 | 12±20% | 0.12 | 1.40 |
| LS54-150 | 150 | 15±20% | 0.14 | 1.30 |
| LS54-180 | 180 | 18±20% | 0.15 | 1.23 |
| LS54-220 | 220 | 22±20% | 0.18 | 1.11 |
| LS54-270 | 270 | 27±20% | 0.20 | 0.97 |
| LS54-330 | 330 | 33±15% | 0.23 | 0.88 |
| LS54-390 | 390 | 39±15% | 0.32 | 0.80 |
| LS54-470 | 470 | 47±15% | 0.37 | 0.72 |
| LS54-560 | 560 | 56±10% | 0.42 | 0.68 |
| LS54-680 | 680 | 68±10% | 0.46 | 0.61 |
| LS54-820 | 820 | 82±10% | 0.60 | 0.58 |
| LS54-101 | 101 | 100±10% | 0.70 | 0.52 |
| LS54-121 | 121 | 120±10% | 0.93 | 0.48 |
| LS54-151 | 151 | 150±10% | 1.10 | 0.40 |
| LS54-181 | 181 | 180±10% | 1.38 | 0.38 |
| LS54-221 | 221 | 220±10% | 1.57 | 0.35 |

*INDUCTANCE & RATING CURRENT

Measuring Frequency: 1.0uH ~ 8.2uH(7.96MHz), 10uH ~ 82uH(2.52MHz)
100uH ~ 820uH(1KHz)

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

SMD POWER INDUCTORS

ELECTRICAL SPECIFICATION @25°C

| UMEC PART NUMBER | MARK | INDUCTANCE(uH) | D.C.R(Ω) MAX. | RATING CURRENT(A) |
|---------------------|------|----------------|------------------|----------------------|
| LS73 TYPE | | | | |
| LS73-100 | 100 | 10±20% | 0.080 | 1.44 |
| LS73-120 | 120 | 12±20% | 0.089 | 1.39 |
| LS73-150 | 150 | 15±20% | 0.104 | 1.24 |
| LS73-180 | 180 | 18±20% | 0.111 | 1.12 |
| LS73-220 | 220 | 22±20% | 0.129 | 1.07 |
| LS73-270 | 270 | 27±20% | 0.153 | 0.94 |
| LS73-330 | 330 | 33±20% | 0.170 | 0.85 |
| LS73-390 | 390 | 39±20% | 0.217 | 0.74 |
| LS73-470 | 470 | 47±20% | 0.252 | 0.68 |
| LS73-560 | 560 | 56±10% | 0.282 | 0.64 |
| LS73-680 | 680 | 68±10% | 0.332 | 0.59 |
| LS73-820 | 820 | 82±10% | 0.406 | 0.54 |
| LS73-101 | 101 | 100±10% | 0.481 | 0.51 |
| LS73-121 | 121 | 120±10% | 0.536 | 0.49 |
| LS73-151 | 151 | 150±10% | 0.755 | 0.40 |
| LS73-181 | 181 | 180±10% | 1.022 | 0.36 |
| LS73-221 | 221 | 220±10% | 1.200 | 0.31 |
| LS73-271 | 271 | 270±10% | 1.306 | 0.29 |
| LS73-331 | 331 | 330±10% | 1.495 | 0.28 |
| LS75 TYPE | | | | |
| LS75-100 | 100 | 10±10% | 0.07 | 2.30 |
| LS75-120 | 120 | 12±10% | 0.08 | 2.00 |
| LS75-150 | 150 | 15±10% | 0.09 | 1.80 |
| LS75-180 | 180 | 18±10% | 0.10 | 1.60 |
| LS75-220 | 220 | 22±10% | 0.11 | 1.50 |
| LS75-270 | 270 | 27±10% | 0.12 | 1.30 |
| LS75-330 | 330 | 33±10% | 0.13 | 1.20 |
| LS75-390 | 390 | 39±10% | 0.16 | 1.10 |
| LS75-470 | 470 | 47±10% | 0.18 | 1.10 |
| LS75-560 | 560 | 56±10% | 0.24 | 0.94 |
| LS75-680 | 680 | 68±10% | 0.28 | 0.85 |
| LS75-820 | 820 | 82±10% | 0.37 | 0.78 |
| LS75-101 | 101 | 100±10% | 0.43 | 0.72 |
| LS75-121 | 121 | 120±10% | 0.47 | 0.66 |
| LS75-151 | 151 | 150±10% | 0.64 | 0.58 |
| LS75-181 | 181 | 180±10% | 0.71 | 0.51 |
| LS75-221 | 221 | 220±10% | 0.96 | 0.49 |
| LS75-271 | 271 | 270±10% | 1.11 | 0.42 |
| LS75-331 | 331 | 330±10% | 1.26 | 0.40 |
| LS75-391 | 391 | 390±10% | 1.77 | 0.36 |
| LS75-471 | 471 | 470±10% | 1.96 | 0.34 |

*INDUCTANCE & RATING CURRENT

Measuring Frequency: 1.0uH ~ 8.2uH(7.96MHz), 10uH ~ 82uH(2.52MHz)
100uH ~ 820uH(1KHz)

*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)

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

SMD POWER INDUCTORS

ELECTRICAL SPECIFICATION @25°C

| UMEC PART NUMBER | MARK | INDUCTANCE(uH) | D.C.R(Ω) MAX. | RATING CURRENT(A) |
|---------------------|------|----------------|------------------|----------------------|
| LS104 TYPE | | | | |
| LS104-100 | 100 | 10±20% | 0.053 | 2.38 |
| LS104-120 | 120 | 12±20% | 0.061 | 2.13 |
| LS104-150 | 150 | 15±20% | 0.070 | 1.87 |
| LS104-180 | 180 | 18±20% | 0.081 | 1.73 |
| LS104-220 | 220 | 22±20% | 0.088 | 1.60 |
| LS104-270 | 270 | 27±20% | 0.100 | 1.44 |
| LS104-330 | 330 | 33±20% | 0.120 | 1.26 |
| LS104-390 | 390 | 39±20% | 0.151 | 1.20 |
| LS104-470 | 470 | 47±20% | 0.170 | 1.10 |
| LS104-560 | 560 | 56±10% | 0.199 | 1.01 |
| LS104-680 | 680 | 68±10% | 0.223 | 0.91 |
| LS104-820 | 820 | 82±10% | 0.252 | 0.85 |
| LS104-101 | 101 | 100±10% | 0.344 | 0.74 |
| LS104-121 | 121 | 120±10% | 0.396 | 0.69 |
| LS104-151 | 151 | 150±10% | 0.544 | 0.61 |
| LS104-181 | 181 | 180±10% | 0.621 | 0.56 |
| LS104-221 | 221 | 220±10% | 0.721 | 0.53 |
| LS104-271 | 271 | 270±10% | 0.949 | 0.45 |
| LS104-331 | 331 | 330±10% | 1.100 | 0.42 |
| LS104-391 | 391 | 390±10% | 1.245 | 0.38 |
| LS104-471 | 471 | 470±10% | 1.526 | 0.35 |
| LS104-561 | 561 | 560±10% | 1.904 | 0.32 |

*INDUCTANCE & RATING CURRENT

Measuring Frequency: 1.0uH ~ 8.2uH(7.96MHz), 10uH ~ 82uH(2.52MHz)

100uH ~ 820uH(1KHz)

*The inductance is 10% lower then its initial value at rating DC current when at

$\Delta t=40^{\circ}\text{C}$ whichever is lower.

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hp 42841A BIAS CURRENT SOURCE)

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

SMD POWER INDUCTORS

ELECTRICAL SPECIFICATION @25°C

| UMEC PART NUMBER | MARK | INDUCTANCE(uH) | D.C.R(Ω) MAX. | RATING CURRENT(A) |
|---------------------|------|----------------|------------------|----------------------|
| LS105 TYPE | | | | |
| LS105-100 | 100 | 10±20% | 0.06 | 2.60 |
| LS105-120 | 120 | 12±20% | 0.07 | 2.45 |
| LS105-150 | 150 | 15±20% | 0.08 | 2.27 |
| LS105-180 | 180 | 18±20% | 0.09 | 2.15 |
| LS105-220 | 220 | 22±20% | 0.10 | 1.95 |
| LS105-270 | 270 | 27±20% | 0.11 | 1.76 |
| LS105-330 | 330 | 33±20% | 0.12 | 1.50 |
| LS105-390 | 390 | 39±20% | 0.14 | 1.37 |
| LS105-470 | 470 | 47±10% | 0.17 | 1.28 |
| LS105-560 | 560 | 56±10% | 0.19 | 1.17 |
| LS105-680 | 680 | 68±10% | 0.22 | 1.11 |
| LS105-820 | 820 | 82±10% | 0.25 | 1.00 |
| LS105-101 | 101 | 100±10% | 0.35 | 0.97 |
| LS105-121 | 121 | 120±10% | 0.40 | 0.89 |
| LS105-151 | 151 | 150±10% | 0.47 | 0.78 |
| LS105-181 | 181 | 180±10% | 0.63 | 0.72 |
| LS105-221 | 221 | 220±10% | 0.73 | 0.66 |
| LS105-271 | 271 | 270±10% | 0.97 | 0.57 |
| LS105-331 | 331 | 330±10% | 1.15 | 0.52 |
| LS105-391 | 391 | 390±10% | 1.30 | 0.48 |
| LS105-471 | 471 | 470±10% | 1.48 | 0.42 |
| LS105-561 | 561 | 560±10% | 1.90 | 0.33 |
| LS105-681 | 681 | 680±10% | 2.25 | 0.28 |
| LS105-821 | 821 | 820±10% | 2.55 | 0.24 |

*INDUCTANCE & RATING CURRENT

Measuring Frequency: 1.0uH ~ 8.2uH(7.96MHz), 10uH ~ 82uH(2.52MHz)

100uH ~ 820uH(1KHz)

*The inductance is 10% lower than its initial value at rating DC current when at

$\Delta t = 40^{\circ}\text{C}$ whichever is lower.

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