

SMD Power Inductor(HLSD Series) 贴片功率电感 HLSD 系列

FEATURES 特点

- High heat resistance and excellent solderability.
良好的可焊性
- Excellent terminal strength construction.
良好的焊盘结构
- Surface mount inductor with high current rating.
大电流表面贴装电感



APPLICATIONS 应用

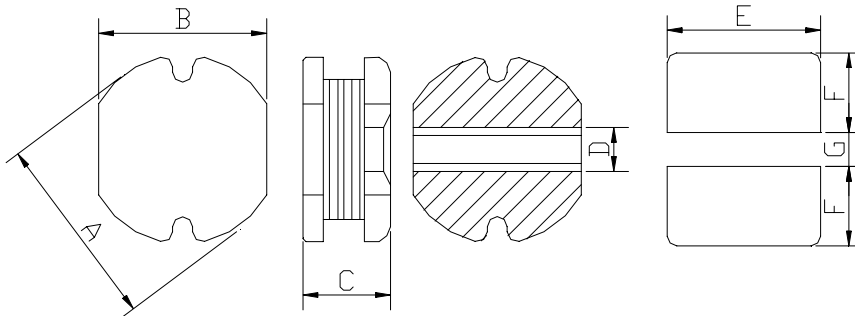
- Ideally used in Digital camera, notebook PC, LCD TV set, DC-DC Converters, etc.
用于数码相机、笔记本电脑、LCD 电视、DC-DC 转换等。

Product Identification 产品标识

HLSD **32** - **3R3** **M** : **LF**
 ① ② ③ ④ ⑤

- ① Series name 系列名称
- ② Product dimensions 产品尺寸: (3.5*3.0*2.1 mm)
- ③ Inductance Value 电感量: (3R3:3.3uH 100: 10uH; 101:100uH)
- ④ Inductance Tolerance 电感量公差: (K:10% ; M:20% ; N:30%)
- ⑤ Lead free products 无铅产品

Shapes And Dimensions 外形及尺寸示意图



| Series | Dimensions(mm) | | | | | | |
|--------|----------------|---------|---------|----------|-----|-----|-----|
| | A | B | C | D | E | F | G |
| HLSD32 | 3.5±0.3 | 3.0±0.3 | 2.1±0.3 | 1.0 Ref. | 3.5 | 1.3 | 1.0 |
| HLSD43 | 4.5±0.3 | 4.0±0.3 | 3.2±0.3 | 1.4 Ref. | 4.5 | 1.8 | 1.5 |
| HLSD54 | 5.8±0.3 | 5.2±0.3 | 4.5±0.5 | 1.6 Ref. | 5.8 | 2.2 | 1.7 |
| HLSD75 | 7.8±0.3 | 7.0±0.3 | 5.0±0.5 | 2.4 Ref. | 7.5 | 3.0 | 2.0 |

Electrical Characteristics 电气性能

HLSD32 Series

| Part Number | L (μ H) | Tolerance | Test freq. (MHz) | DCR max. (Ω) | Rated Current (A) |
|----------------|-----------------|------------|---------------------|--------------------------|----------------------|
| HLSD32-1R0M-LF | 1.0 | $\pm 20\%$ | 7.96 | 0.07 | 2.10 |
| HLSD32-1R2M-LF | 1.2 | $\pm 20\%$ | 7.96 | 0.08 | 1.70 |
| HLSD32-1R8M-LF | 1.8 | $\pm 20\%$ | 7.96 | 0.09 | 1.32 |
| HLSD32-2R2M-LF | 2.2 | $\pm 20\%$ | 7.96 | 0.10 | 1.28 |
| HLSD32-2R7M-LF | 2.7 | $\pm 20\%$ | 7.96 | 0.11 | 1.24 |
| HLSD32-3R3M-LF | 3.3 | $\pm 20\%$ | 7.96 | 0.14 | 1.18 |
| HLSD32-3R9M-LF | 3.9 | $\pm 20\%$ | 7.96 | 0.14 | 1.15 |
| HLSD32-4R7M-LF | 4.7 | $\pm 20\%$ | 7.96 | 0.17 | 1.04 |
| HLSD32-5R6M-LF | 5.6 | $\pm 20\%$ | 7.96 | 0.18 | 1.00 |
| HLSD32-6R8M-LF | 6.8 | $\pm 20\%$ | 7.96 | 0.20 | 0.880 |
| HLSD32-8R2M-LF | 8.2 | $\pm 20\%$ | 7.96 | 0.22 | 0.780 |
| HLSD32-100K-LF | 10 | $\pm 10\%$ | 0.10 | 0.23 | 0.760 |
| HLSD32-120K-LF | 12 | $\pm 10\%$ | 0.10 | 0.27 | 0.685 |
| HLSD32-150K-LF | 15 | $\pm 10\%$ | 0.10 | 0.31 | 0.635 |
| HLSD32-180K-LF | 18 | $\pm 10\%$ | 0.10 | 0.41 | 0.525 |
| HLSD32-220K-LF | 22 | $\pm 10\%$ | 0.10 | 0.47 | 0.500 |
| HLSD32-270K-LF | 27 | $\pm 10\%$ | 0.10 | 0.66 | 0.405 |
| HLSD32-330K-LF | 33 | $\pm 10\%$ | 0.10 | 0.76 | 0.380 |
| HLSD32-390K-LF | 39 | $\pm 10\%$ | 0.10 | 0.85 | 0.355 |
| HLSD32-470K-LF | 47 | $\pm 10\%$ | 0.10 | 0.97 | 0.330 |
| HLSD32-560K-LF | 56 | $\pm 10\%$ | 0.10 | 1.25 | 0.290 |
| HLSD32-680K-LF | 68 | $\pm 10\%$ | 0.10 | 1.45 | 0.275 |
| HLSD32-820K-LF | 82 | $\pm 10\%$ | 0.10 | 1.85 | 0.235 |
| HLSD32-101K-LF | 100 | $\pm 10\%$ | 0.10 | 2.20 | 0.220 |
| MGSD32-121K-LF | 120 | $\pm 10\%$ | 0.10 | 2.90 | 0.185 |
| HLSD32-151K-LF | 150 | $\pm 10\%$ | 0.10 | 3.40 | 0.170 |
| HLSD32-181K-LF | 180 | $\pm 10\%$ | 0.10 | 3.90 | 0.165 |
| HLSD32-221K-LF | 220 | $\pm 10\%$ | 0.10 | 4.50 | 0.155 |

1. Rated Current: it is either the inductance is 10% lower than its nominal value in D.C. saturation characteristics or temperature rise becomes $\Delta T=40^{\circ}\text{C}$, whichever is lower.

HLSD43 Series

| Part Number | L (μ H) | tolerance | Test freq. (MHz) | DCR max. (Ω) | Rated Current (A) |
|----------------|-----------------|------------|---------------------|--------------------------|----------------------|
| HLSD43-1R0M-LF | 1.0 | $\pm 20\%$ | 7.96 | 48.7 | 2.70 |
| HLSD43-1R4M-LF | 1.4 | $\pm 20\%$ | 7.96 | 56.2 | 2.50 |
| HLSD43-1R8M-LF | 1.8 | $\pm 20\%$ | 7.96 | 63.7 | 2.33 |
| HLSD43-2R2M-LF | 2.2 | $\pm 20\%$ | 7.96 | 71.2 | 2.25 |
| HLSD43-2R7M-LF | 2.7 | $\pm 20\%$ | 7.96 | 78.7 | 2.16 |
| HLSD43-3R3M-LF | 3.3 | $\pm 20\%$ | 7.96 | 86.2 | 2.00 |
| HLSD43-3R9M-LF | 3.9 | $\pm 20\%$ | 7.96 | 93.7 | 1.84 |
| HLSD43-4R7M-LF | 4.7 | $\pm 20\%$ | 7.96 | 108.7 | 1.62 |
| HLSD43-5R6M-LF | 5.6 | $\pm 20\%$ | 7.96 | 125.7 | 1.48 |
| HLSD43-6R8M-LF | 6.8 | $\pm 20\%$ | 7.96 | 131.2 | 1.43 |
| HLSD43-8R2M-LF | 8.2 | $\pm 20\%$ | 7.96 | 146.2 | 1.37 |
| HLSD43-100M-LF | 10 | $\pm 20\%$ | 2.52 | 182 | 1.04 |
| HLSD43-120M-LF | 12 | $\pm 20\%$ | 2.52 | 210 | 0.97 |
| HLSD43-150M-LF | 15 | $\pm 20\%$ | 2.52 | 235 | 0.85 |
| HLSD43-180M-LF | 18 | $\pm 20\%$ | 2.52 | 338 | 0.74 |
| HLSD43-220M-LF | 22 | $\pm 20\%$ | 2.52 | 378 | 0.68 |
| HLSD43-270M-LF | 27 | $\pm 20\%$ | 2.52 | 522 | 0.62 |
| HLSD43-330K-LF | 33 | $\pm 10\%$ | 2.52 | 540 | 0.56 |
| HLSD43-390K-LF | 39 | $\pm 10\%$ | 2.52 | 587 | 0.52 |
| HLSD43-470K-LF | 47 | $\pm 10\%$ | 2.52 | 844 | 0.44 |
| HLSD43-560K-LF | 56 | $\pm 10\%$ | 2.52 | 937 | 0.42 |
| HLSD43-680K-LF | 68 | $\pm 10\%$ | 2.52 | 1117 | 0.37 |

1. Rated Current: it is either the inductance is 10% lower than its nominal value in D.C. saturation characteristics or temperature rise becomes $\Delta T=40^{\circ}\text{C}$, whichever is lower.

HLSD54 Series

| Part Number | L (uH) | tolerance | Tst freq. (Hz) | DCR max. (Ω) | Rated Current (A) |
|----------------|-----------|------------|-------------------|--------------------------|----------------------|
| HLSD54-100M-LF | 10 | $\pm 20\%$ | 2.52M | 0.10 | 1.44 |
| HLSD54-120M-LF | 12 | $\pm 20\%$ | 2.52M | 0.12 | 1.40 |
| HLSD54-150M-LF | 15 | $\pm 20\%$ | 2.52M | 0.14 | 1.30 |
| HLSD54-180M-LF | 18 | $\pm 20\%$ | 2.52M | 0.15 | 1.23 |
| HLSD54-220M-LF | 22 | $\pm 20\%$ | 2.52M | 0.18 | 1.11 |
| HLSD54-270M-LF | 27 | $\pm 20\%$ | 2.52M | 0.20 | 0.97 |
| HLSD54-330L-LF | 33 | $\pm 15\%$ | 2.52M | 0.23 | 0.88 |
| HLSD54-390L-LF | 39 | $\pm 15\%$ | 2.52M | 0.32 | 0.80 |
| HLSD54-470L-LF | 47 | $\pm 15\%$ | 2.52M | 0.37 | 0.72 |
| HLSD54-560K-LF | 56 | $\pm 10\%$ | 2.52M | 0.42 | 0.68 |
| HLSD54-680K-LF | 68 | $\pm 10\%$ | 2.52M | 0.46 | 0.61 |
| HLSD54-820K-LF | 82 | $\pm 10\%$ | 2.52M | 0.60 | 0.58 |
| HLSD54-101K-LF | 100 | $\pm 10\%$ | 1K | 0.70 | 0.52 |
| HLSD54-121K-LF | 120 | $\pm 10\%$ | 1K | 0.93 | 0.48 |
| HLSD54-151K-LF | 150 | $\pm 10\%$ | 1K | 1.10 | 0.40 |
| HLSD54-181K-LF | 180 | $\pm 10\%$ | 1K | 1.38 | 0.38 |
| HLSD54-221K-LF | 220 | $\pm 10\%$ | 1K | 1.57 | 0.35 |

1. Rated Current: it is either the inductance is 10% lower than its nominal value in D.C. saturation characteristics or temperature rise becomes $\Delta T=40^{\circ}\text{C}$, whichever is lower.

HLSD75 Series

| Part Number | L±10% (uH) | Test freq. (Hz) | DCR max. (Ω) | Rated Current (A) |
|----------------|---------------|--------------------|------------------|----------------------|
| HLSD75-100K-LF | 10 | 2.52M | 0.07 | 2.3 |
| HLSD75-120K-LF | 12 | 2.52M | 0.08 | 2.0 |
| HLSD75-150K-LF | 15 | 2.52M | 0.09 | 1.8 |
| HLSD75-180K-LF | 18 | 2.52M | 0.10 | 1.6 |
| HLSD75-220K-LF | 22 | 2.52M | 0.11 | 1.5 |
| HLSD75-270K-LF | 27 | 2.52M | 0.12 | 1.3 |
| HLSD75-330K-LF | 33 | 2.52M | 0.13 | 1.2 |
| HLSD75-390K-LF | 39 | 2.52M | 0.16 | 1.1 |
| HLSD75-470K-LF | 47 | 2.52M | 0.18 | 1.1 |
| HLSD75-560K-LF | 56 | 2.52M | 0.24 | 0.94 |
| HLSD75-680K-LF | 68 | 2.52M | 0.28 | 0.85 |
| HLSD75-820K-LF | 82 | 2.52M | 0.37 | 0.78 |
| HLSD75-101K-LF | 100 | 1K | 0.43 | 0.72 |
| HLSD75-121K-LF | 120 | 1K | 0.47 | 0.66 |
| HLSD75-151K-LF | 150 | 1K | 0.64 | 0.58 |
| HLSD75-181K-LF | 180 | 1K | 0.71 | 0.51 |
| HLSD75-221K-LF | 220 | 1K | 0.96 | 0.49 |
| HLSD75-271K-LF | 270 | 1K | 1.11 | 0.42 |
| HLSD75-331K-LF | 330 | 1K | 1.26 | 0.40 |
| HLSD75-391K-LF | 390 | 1K | 1.77 | 0.36 |
| HLSD75-471K-LF | 470 | 1K | 1.96 | 0.34 |

1. Rated Current: it is either the inductance is 10% lower than its nominal value in D.C. saturation characteristics or temperature rise becomes $\Delta T=40^{\circ}\text{C}$, whichever is lower.
