

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

FEATURES 特点

- Excellent solderability and high heat resistance.
良好的可焊性
- Low cost and packed in embossed carrier tape.
低成本编带包装
- Magnetically shielded construction.
磁屏蔽结构



APPLICATIONS 应用

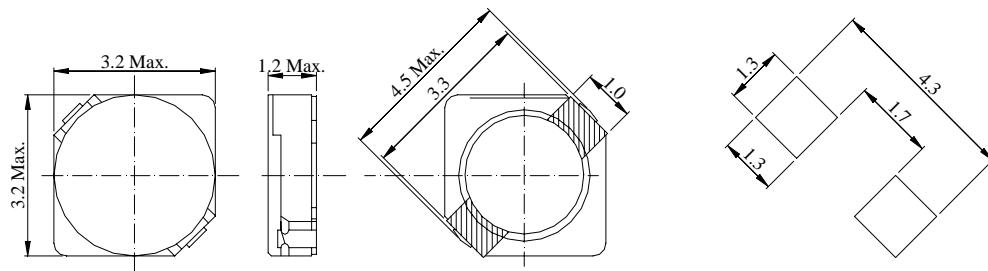
- Ideally used in Mobilephone,PDA,MP3,MDSC/DVC,Portable DVD, etc as DC-DC Converter.
用于移动电话、PDA、MP3、影碟机、便携式DVD、DC-DC转换等。

Product Identification 产品标识

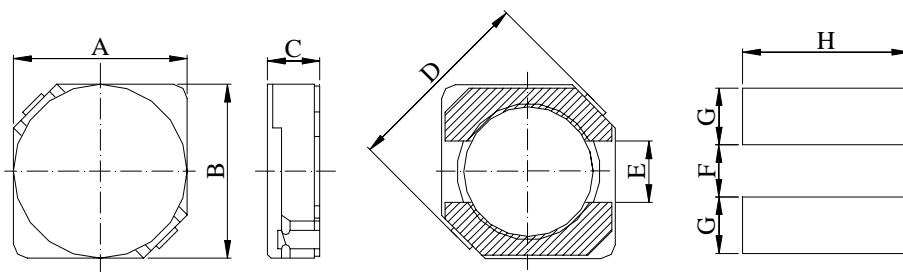
HLSFD 4D28 - 100 N = LF
 ① ② ③ ④ ⑤

- ① Series name 系列名称
- ② Product dimensions 产品尺寸: (4.8*4.8*2.8 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% or 25%)
- ⑤ Lead free products 无铅产品

Shapes And Dimensions 外形及尺寸示意图



MGSFD2D11, MGSFD2D11HP Series



Series	Dimensions(mm)							
	A Max.	B Max.	C Max.	D Max.	E	F	G	H
HLSFD4D18	5.0	5.0	2.0	6.9	1.5	1.5	1.9	5.3
HLSFD4D28	5.0	5.0	3.0	6.9	1.5	1.5	1.9	5.3
HLSFD5D18	6.0	6.0	2.0	8.2	2.0	2.0	2.15	6.3
HLSFD5D28	6.0	6.0	3.0	8.2	2.0	2.0	2.15	6.3
HLSFD6D28	7.0	7.0	3.0	9.5	2.0	2.0	2.65	7.3

Electrical Characteristics 电气性能

HLSFD2D11 Series

Part Number	L \pm 30% (uH)	DCR max. (Ohms)	Isat (A)	Irms (A)
HLSFD2D11-1R5N-LF	1.5	0.068	0.90	1.48
HLSFD2D11-2R2N-LF	2.2	0.098	0.78	1.27
HLSFD2D11-3R3N-LF	3.3	0.123	0.60	1.02
HLSFD2D11-4R7N-LF	4.7	0.170	0.50	0.88
HLSFD2D11-6R8N-LF	6.8	0.260	0.44	0.80
HLSFD2D11-100N-LF	10.0	0.400	0.35	0.65

1. Test freq. at 100KHz.
2. Isat: DC current at which the inductance drops 35% from its value without current
3. Irms: Current that causes a 40°C temperature rise from 25°C ambient.

HLSFD2D11HP Series

Part Number	L \pm 30% (uH)	DCR max. (Ohms)	Isat (A)	Irms (A)
HLSFD2D11HP-1R5N-LF	1.5	0.080	1.35	1.60
HLSFD2D11HP-2R2N-LF	2.2	0.120	1.10	1.30
HLSFD2D11HP-3R3N-LF	3.3	0.173	0.90	0.90
HLSFD2D11HP-4R7N-LF	4.7	0.238	0.75	0.85
HLSFD2D11HP-6R8N-LF	6.8	0.371	0.63	0.65
HLSFD2D11HP-100N-LF	10.0	0.559	0.52	0.52

1. Test freq. at 100KHz.
2. Isat: DC current at which the inductance drops 35% from its value without current
3. Irms: Current that causes a 40°C temperature rise from 25°C ambient.

HLSFD4D18 Series

Part Number	L \pm 30% (uH)	Test freq. (MHz)	DCR max. (Ohms)	Rated Current (A)
HLSFD4D18-1R0N-LF	1.0	7.96	0.045	1.72
HLSFD4D18-2R2N-LF	2.2	7.96	0.075	1.32
HLSFD4D18-2R7N-LF	2.7	7.96	0.105	1.28
HLSFD4D18-3R3N-LF	3.3	7.96	0.110	1.04
HLSFD4D18-3R9N-LF	3.9	7.96	0.155	0.88
HLSFD4D18-4R7N-LF	4.7	7.96	0.162	0.84
HLSFD4D18-5R6N-LF	5.6	7.96	0.170	0.80
HLSFD4D18-6R8N-LF	6.8	7.96	0.200	0.76
HLSFD4D18-8R2N-LF	8.2	7.96	0.245	0.68
HLSFD4D18-100N-LF	10.0	0.1	0.200	0.61
HLSFD4D18-120N-LF	12.0	0.1	0.210	0.56
HLSFD4D18-150N-LF	15.0	0.1	0.240	0.50
HLSFD4D18-180N-LF	18.0	0.1	0.338	0.48
HLSFD4D18-220N-LF	22.0	0.1	0.397	0.41
HLSFD4D18-270N-LF	27.0	0.1	0.441	0.35
HLSFD4D18-330N-LF	33.0	0.1	0.694	0.32
HLSFD4D18-390N-LF	39.0	0.1	0.709	0.30
HLSFD4D18-470N-LF	47.0	0.1	0.922	0.28
HLSFD4D18-560N-LF	56.0	0.1	1.080	0.26
HLSFD4D18-680N-LF	68.0	0.1	1.300	0.24
HLSFD4D18-820N-LF	82.0	0.1	1.560	0.22
HLSFD4D18-101N-LF	100.0	0.1	1.730	0.20
HLSFD4D18-121N-LF	120.0	0.1	2.390	0.18
HLSFD4D18-151N-LF	150.0	0.1	2.670	0.15
HLSFD4D18-181N-LF	180.0	0.1	4.000	0.14

1. Rated current: It is either the inductance is 35% lower than its nominal value in D.C. saturation characteristics or temperature raise becomes $\Delta T=40^\circ\text{C}$, whichever is lower.

HLSFD4D28 Series

Part Number	L \pm 30% (μ H)	DCR max. (Ohms)	Rated Current (A)
HLSFD4D28-1R2N-LF	1.2	0.024	2.56
HLSFD4D28-1R8N-LF	1.8	0.028	2.20
HLSFD4D28-2R2N-LF	2.2	0.032	2.04
HLSFD4D28-2R7N-LF	2.7	0.044	1.60
HLSFD4D28-3R3N-LF	3.3	0.050	1.57
HLSFD4D28-3R9N-LF	3.9	0.065	1.44
HLSFD4D28-4R7N-LF	4.7	0.072	1.32
HLSFD4D28-5R6N-LF	5.6	0.101	1.17
HLSFD4D28-6R8N-LF	6.8	0.109	1.12
HLSFD4D28-8R2N-LF	8.2	0.118	1.04
HLSFD4D28-100N-LF	10.0	0.128	1.00
HLSFD4D28-120N-LF	12.0	0.132	0.84
HLSFD4D28-150N-LF	15.0	0.149	0.76
HLSFD4D28-180N-LF	18.0	0.166	0.72
HLSFD4D28-220N-LF	22.0	0.235	0.70
HLSFD4D28-270N-LF	27.0	0.261	0.58
HLSFD4D28-330N-LF	33.0	0.331	0.56
HLSFD4D28-390N-LF	39.0	0.384	0.50
HLSFD4D28-470N-LF	47.0	0.587	0.48
HLSFD4D28-560N-LF	56.0	0.625	0.41
HLSFD4D28-680N-LF	68.0	0.699	0.35
HLSFD4D28-820N-LF	82.0	0.915	0.32
HLSFD4D28-101N-LF	100.0	1.020	0.29
HLSFD4D28-121N-LF	120.0	1.270	0.27
HLSFD4D28-151N-LF	150.0	1.350	0.24
HLSFD4D28-181N-LF	180.0	1.540	0.22

1. Test freq. at 100KHz.

2. Rated current: It is either the inductance is 35% lower than its nominal value in D.C. saturation characteristics or temperature raise becomes $\Delta T=40^{\circ}\text{C}$, whichever is lower.

HLSFD5D18 Series

Part Number	L \pm 30% (uH)	DCR max. (Ohms)	Rated Current (A)
HLSFD5D18-4R1N-LF	4.1	0.057	1.95
HLSFD5D18-5R4N-LF	5.4	0.076	1.60
HLSFD5D18-6R2N-LF	6.2	0.096	1.40
HLSFD5D18-8R9N-LF	8.9	0.116	1.25
HLSFD5D18-100N-LF	10.0	0.124	1.20
HLSFD5D18-120N-LF	12.0	0.153	1.10
HLSFD5D18-150N-LF	15.0	0.196	0.97
HLSFD5D18-180N-LF	18.0	0.210	0.85
HLSFD5D18-220N-LF	22.0	0.290	0.80
HLSFD5D18-270N-LF	27.0	0.330	0.75
HLSFD5D18-330N-LF	33.0	0.385	0.65
HLSFD5D18-390N-LF	39.0	0.520	0.57
HLSFD5D18-470N-LF	47.0	0.595	0.54
HLSFD5D18-560N-LF	56.0	0.665	0.50
HLSFD5D18-680N-LF	68.0	0.840	0.43
HLSFD5D18-820N-LF	82.0	0.978	0.41
HLSFD5D18-101N-LF	100.0	1.200	0.36

1. Test freq. at 100KHz.

2. Rated current: It is either the inductance is 35% lower than its nominal value in D.C. saturation characteristics or temperature raise becomes $\Delta T=40^{\circ}\text{C}$, whichever is lower.

HLSFD6D28 Series

Part Number	L \pm 30% (uH)	DCR max. (Ohms)	Rated Current (A)
HLSFD6D28-3R0N-LF	3.0	0.024	3.00
HLSFD6D28-3R9N-LF	3.9	0.027	2.60
HLSFD6D28-5R0N-LF	5.0	0.031	2.40
HLSFD6D28-6R0N-LF	6.0	0.035	2.25
HLSFD6D28-7R3N-LF	7.3	0.054	2.10
HLSFD6D28-8R6N-LF	8.6	0.058	1.85
HLSFD6D28-100N-LF	10.0	0.065	1.70
HLSFD6D28-120N-LF	12.0	0.070	1.55
HLSFD6D28-150N-LF	15.0	0.084	1.40
HLSFD6D28-180N-LF	18.0	0.095	1.32
HLSFD6D28-220N-LF	22.0	0.128	1.20
HLSFD6D28-270N-LF	27.0	0.142	1.05
HLSFD6D28-330N-LF	33.0	0.165	0.97
HLSFD6D28-390N-LF	39.0	0.210	0.86
HLSFD6D28-470N-LF	47.0	0.238	0.80
HLSFD6D28-560N-LF	56.0	0.277	0.73
HLSFD6D28-680N-LF	68.0	0.304	0.65
HLSFD6D28-820N-LF	82.0	0.390	0.60
HLSFD6D28-101N-LF	100.0	0.535	0.54

1. Test freq. at 10KHz.
2. Rated current: It is either the inductance is 35% lower than its nominal value in D.C. saturation characteristics or temperature raise becomes $\Delta T=40^{\circ}\text{C}$, whichever is lower.