

# Unshielded Power Inductors-LSC Series



## LSC Series Low Cost/Customer Design (開放型)

- Various high power surface mountable type inductors are superior to high saturation. These are also magnetic shielded type for consideration against radiation.
- 電感器系根據客戶提供的規格書設計。Inductor is based on a customers' specifications and demand to set up.

### Applications

- VRT, OA equipment, LCD television sets, notebook computers, portable communications equipment, DC/DC converters, etc.

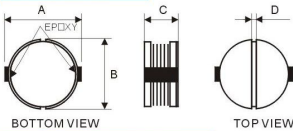


### Features

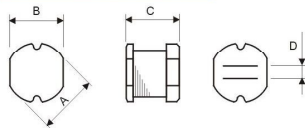
- High saturation for surface mounting
- Available in magnetically shielded.
- Suitable for large currents.
- Ideal for a variety of DC-DC converter inductor application.
- Available on tape and reel for auto surfacing mounting.

### Shapes and Dimensions

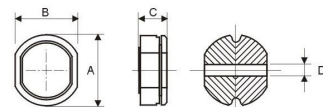
#### LSC 0301



#### LSC 031B~1005



#### LSC 105B



### Products Identification

LSC □□□□-□□□□

- Tolerance
- Inductance
- Packaging Style
- Dimensions
- Product Symbol

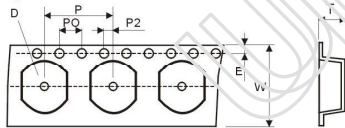
- Packaging: T: Tape and Reel
- Tolerance: K: ±10%; M: ±20%

### Dimensions in mm

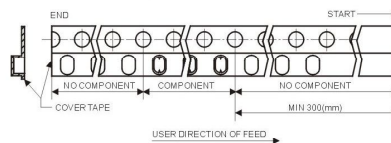
Type	A	B	C	D
LSC0301	3.5 <sup>+0</sup>	3.0 <sup>+0</sup>	1.0 <sup>+0</sup>	0.6TYP
LSC031B	3.3±0.3	3.0±0.3	1.5±0.3	1.0TYP
LSC0302	3.3±0.3	3.0±0.3	2.1±0.3	1.0TYP
LSC0403	4.5±0.3	4.0±0.3	3.2±0.3	1.2
LSC0501	5.8±0.3	5.2±0.3	2.2 <sup>+0</sup>	2.0TYP
LSC0502	5.8±0.3	5.2±0.3	2.5±0.3	2.0TYP
LSC0503	5.8±0.3	5.2±0.3	3.0±0.3	2.0TYP
LSC0504	5.8±0.3	5.2±0.3	4.5±0.4	1.3
LSC0703	7.8±0.3	7.0±0.3	3.5±0.3	2.1
LSC0705	7.8±0.3	7.0±0.3	5.0±0.3	2.1
LSC1004	10.0±0.3	9.0±0.3	4.0±0.5	2.1
LSC1005	10.0±0.4	9.0±0.4	5.4±0.4	2.1
LSC105B	10.0±0.4	9.0±0.4	5.0±0.5	2.5

### Packaging Specifications

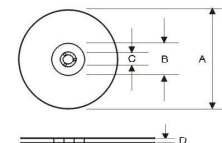
#### Tape Dimensions



#### Tape Materials



#### Reel Dimensions



### Dimensions in mm

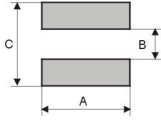
TYPE	Tape Dimensions							Reel Dimensions				Quantity purchase/ REEL
	T	D	E	W	P	P0	P2	A	B	C	D	
LSC0301	1.2	1.50	1.75	12	8	4	2	330	100	13	13.4	5000
LSC031B	1.8	1.55	1.75	12	8	4	2	330	100	13	13.4	3000
LSC0302	2.5	1.55	1.75	12	8	4	2	330	100	13	13.4	3000
LSC0403	3.1	1.55	1.75	12	8	4	2	330	100	13	13.4	2000
LSC0501	2.35	1.55	1.75	12	8	4	2	330	100	13	13.4	2000
LSC0502	3.0	1.55	1.75	12	8	4	2	330	100	13	13.4	2000
LSC0503	3.3	1.55	1.75	12	8	4	2	330	100	13	13.4	2000
LSC0504	4.8	1.55	1.75	16	8	4	2	330	100	13	17.4	1500
LSC0703	3.8	1.55	1.75	16	12	4	2	330	100	13	17.4	1000
LSC0705	5.2	1.55	1.75	16	12	4	2	330	100	13	17.4	700
LSC1004	5.8	1.55	1.75	24	12	4	2	330	100	13	24.4	700
LSC1005	5.8	1.55	1.75	24	12	4	2	330	100	13	24.4	700
LSC105B	5.8	1.55	1.75	24	12	4	2	330	100	13	24.4	750



# Unshielded Power Inductors-LSC Series

## Recommended Pattern

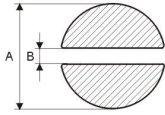
### LSC 0301



Dimensions in mm

Dim.	LSC 0301	LSC 031B	LSC 0302	LSC 0403	LSC 0501	LSC 0502	LSC 0503	LSC 0504	LSC 0703	LSC 0705	LSC 1004	LSC 1005	LSC 105B
A	2.9	4.5	4.5	5.5	6.8	6.8	6.8	6.8	8.8	8.8	11	11	12.5
B	1.5	1.0	1.0	1.2	2.0	2.0	2.0	1.3	2.1	2.1	2.1	2.1	2.5
C	2.9	-	-	-	-	-	-	-	-	-	-	-	-

### LSC 031B~LSC 105B



PAD LAYOUT

## Electrical Characteristics

Stamp	Inductance (μH)	D.C.R (Ω) Max.												
		LSC 0301	LSC 031B	LSC 0302	LSC 0403	LSC 0501	LSC 0502	LSC 0503	LSC 0504	LSC 0703	LSC 0705	LSC 1004	LSC 1005	LSC 105B
1R0	1.0			0.10	0.100	0.100	0.10	0.10						
1R2	1.2							0.10						
1R4	1.4			0.10	0.100	0.100	0.10			0.10				
1R5	1.5							0.10						
1R8	1.8			0.11	0.100	0.100	0.10	0.10		0.10				
2R2	2.2	0.33	0.13	0.13	0.100	0.100	0.10	0.10						
2R7	2.7			0.14	0.100	0.100	0.10	0.10		0.10				
3R3	3.3	0.52		0.17	0.100	0.100	0.10	0.10						
3R9	3.9			0.19	0.100	0.100	0.10	0.10		0.10				
4R7	4.7	0.62	0.20	0.21	0.100	0.134	0.14	0.10		0.10		0.100		
5R6	5.6			0.22	0.101	0.170	0.15	0.12		0.10				
6R8	6.8	0.87		0.25	0.117	0.187	0.16	0.13		0.10		0.100		
8R2	8.2	1.00		0.28	0.132	0.225	0.17	0.15		0.10				
100	10	1.14	0.39	0.32	0.182	0.255	0.18	0.18	0.10	0.10	0.10	0.10	0.100	0.10
120	12	1.44		0.35	0.210	0.292	0.20	0.22	0.12	0.10	0.10	0.10	0.100	0.10
150	15	1.60	0.75	0.40	0.235	0.360	0.22	0.26	0.14	0.10	0.10	0.10	0.100	0.10
180	18			0.48	0.338	0.430	0.25	0.33	0.15	0.11	0.1	0.10	0.100	0.10
220	22	1.90	0.93	0.58	0.378	0.492	0.35	0.42	0.18	0.13	0.11	0.10	0.100	0.10
270	27	2.85		0.65	0.522	0.603	0.45	0.50	0.20	0.15	0.12	0.10	0.110	0.10
330	33		1.43	0.30	0.540	0.796	0.56		0.23	0.17	0.13	0.12	0.120	0.11
390	39			0.90	0.587	0.897	0.69	0.55	0.32	0.22	0.16	0.15	0.140	0.12
470	47		1.69	1.19	0.844	1.020	0.72	0.65	0.37	0.25	0.18	0.17	0.170	0.14
500	50			1.22		1.040								
560	56			1.27	0.937	1.164	0.84	0.8	0.42	0.28	0.24	0.20	0.190	0.19
680	68		2.80	1.73	1.117	1.220	0.90	0.9	0.46	0.33	0.28	0.22	0.220	0.21
750	75			1.90		1.340		1.00						
820	82			1.99		1.570	1.20	1.30	0.60	0.41	0.37	0.25	0.25	0.28
101	100		4.50	2.52	2.000	1.800	1.30	1.50	0.70	0.48	0.43	0.34	0.35	0.34
121	120			2.90		2.000	1.38	2.00	0.93	0.54	0.47	0.40	0.40	0.37
151	150			3.36		2.80	1.81	2.50	1.10	0.75	0.64	0.54	0.47	0.51
181	180			5.10		3.15	1.95		1.38	1.02	0.71	0.62	0.63	0.57
221	220			5.80		4.40	3.00	3.20	1.57	1.20	0.96	0.72	0.73	0.78
271	270			7.80		6.40	3.20	3.50	1.85	1.31	1.11	0.95	0.97	0.87
301	300			8.10		6.75								
331	330			9.24		7.20	3.82	4.20	2.00	1.50	1.26	1.10	1.15	1.20
391	390			10.14		8.40	4.68	4.50	2.60		1.77	1.24	1.30	1.34
461	460			11.15		12.0		6.50						
471	470			11.48		12.4	5.10	7.50	3.00		1.96	1.53	1.48	1.50
561	560			19.49		13.0	8.50	8.00	4.19			1.90	1.90	
681	680			22.00		17.0	10.0		4.44				2.25	
821	820			23.98		19.5	12.0		5.12				2.55	
102	1000			28.80		24.0	18.0		10.00					
122	1200		50.0											
152	1500		72.0											