Model ILSB-1206

Vishay Dale

Monolithic Chip Inductors

FEATURES

- High Reliability.
- Surface Mountable.
- Design of the part makes it inherently shielded.

ELECTRICAL SPECIFICATIONS

Inductance Range: .047µH to 33µH.
Inductance Tolerance: ± 20% for .047µH to .068µH. ± 10% or ± 20% for .10µH to 33µH.
Temperature Range: - 25°C to + 85°C.

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature: - 25°C to + 85°C.
Storage Temperature: - 40°C to + 85°C.
Load Life: Tested at full rated DC current at ± 85°C, 1000 hours. Δ L ≤ ± 5%. Δ Q ≤ ± 30%.
Thermal Shock: Meets requirements of MIL-STD-202, Method 107, 100 cycles - 25°C to + 85°C. Δ L ≤ ± 5%. Δ Q ≤ ± 30%.
Moisture Resistance: Store at + 40°C and 90% minimum relative humidity for 1000 hours. Δ L ≤ ± 5%. Δ Q ≤ ± 30%.

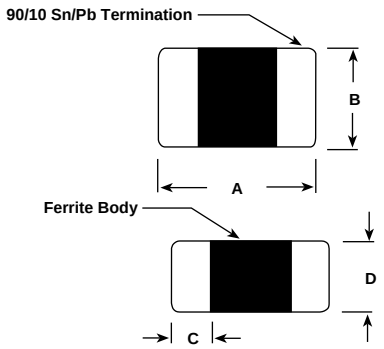
MECHANICAL SPECIFICATIONS

Termination: 90/10 Sn/Pb.
Solderability: Preheat parts to + 150°C to + 180°C for 2 minutes. Solder temperature 230°C for 3 seconds. At least 90% of termination will be recovered by new solder.
Flex Test: Meets the requirements of IEC-384-1 with .0787" [2.0mm] deflection.
Terminal Strength: 1Kg minimum for 30 seconds.
Transverse Rupture: 2.0 Kg with 2.0mm spacing.

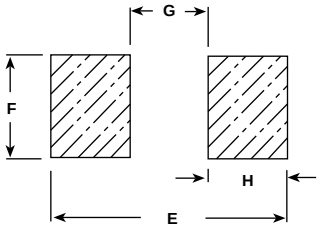
STANDARD ELECTRICAL SPECIFICATIONS [Numbers in brackets indicate millimeters]

INDUCTANCE (µH) ±10%	TOLERANCE	THICKNESS "D" (Inches)	Q (Min.)	TEST FREQUENCY L & Q (MHz)	MINIMUM SELF- RESONANT FREQUENCY (MHz)	MAXIMUM DCR (Ohms)	RATED DC CURRENT (mA)
0.047	± 20%	0.024 ± 0.008 [0.60 ± 0.2]	20	50	368	0.15	300
0.068	± 20%	0.024 ± 0.008 [0.60 ± 0.2]	20	50	322	0.25	300
0.10	± 20%, ± 10%	0.024 ± 0.008 [0.60 ± 0.2]	20	25	271	0.25	250
0.12	± 20%, ± 10%	0.024 ± 0.008 [0.60 ± 0.2]	20	25	253	0.30	250
0.15	± 20%, ± 10%	0.024 ± 0.008 [0.60 ± 0.2]	20	25	230	0.30	250
0.18	± 20%, ± 10%	0.024 ± 0.008 [0.60 ± 0.2]	20	25	213	0.40	250
0.22	± 20%, ± 10%	0.024 ± 0.008 [0.60 ± 0.2]	20	25	196	0.40	250
0.27	± 20%, ± 10%	0.024 ± 0.008 [0.60 ± 0.2]	20	25	173	0.50	250
0.33	± 20%, ± 10%	0.024 ± 0.008 [0.60 ± 0.2]	20	25	167	0.60	250
0.39	± 20%, ± 10%	0.043 ± 0.012 [1.10 ± 0.3]	25	25	156	0.50	200
0.47	± 20%, ± 10%	0.043 ± 0.012 [1.10 ± 0.3]	25	25	144	0.60	200
0.56	± 20%, ± 10%	0.043 ± 0.012 [1.10 ± 0.3]	25	25	133	0.70	150
0.68	± 20%, ± 10%	0.043 ± 0.012 [1.10 ± 0.3]	25	25	121	0.80	150
0.82	± 20%, ± 10%	0.043 ± 0.012 [1.10 ± 0.3]	25	25	115	0.90	150
1.0	± 20%, ± 10%	0.024 ± 0.008 [0.60 ± 0.2]	30	10	87	0.40	100
1.2	± 20%, ± 10%	0.024 ± 0.008 [0.60 ± 0.2]	30	10	75	0.50	100
1.5	± 20%, ± 10%	0.043 ± 0.012 [1.10 ± 0.3]	30	10	69	0.50	50
1.8	± 20%, ± 10%	0.043 ± 0.012 [1.10 ± 0.3]	30	10	64	0.50	50
2.2	± 20%, ± 10%	0.043 ± 0.012 [1.10 ± 0.3]	30	10	58	0.50	50
2.7	± 20%, ± 10%	0.043 ± 0.012 [1.10 ± 0.3]	30	10	52	0.60	50
3.3	± 20%, ± 10%	0.043 ± 0.012 [1.10 ± 0.3]	30	10	48	0.70	50
3.9	± 20%, ± 10%	0.043 ± 0.012 [1.10 ± 0.3]	30	10	44	0.80	50
4.7	± 20%, ± 10%	0.043 ± 0.012 [1.10 ± 0.3]	30	10	41	0.90	50
5.6	± 20%, ± 10%	0.043 ± 0.012 [1.10 ± 0.3]	30	4	37	0.70	25
6.8	± 20%, ± 10%	0.043 ± 0.012 [1.10 ± 0.3]	30	4	34	0.80	25
8.2	± 20%, ± 10%	0.043 ± 0.012 [1.10 ± 0.3]	30	4	30	0.90	25
10.0	± 20%, ± 10%	0.043 ± 0.012 [1.10 ± 0.3]	30	2	28	1.00	25
12.0	± 20%, ± 10%	0.043 ± 0.012 [1.10 ± 0.3]	30	2	26	1.05	15
15.0	± 20%, ± 10%	0.043 ± 0.012 [1.10 ± 0.3]	35	1	22	0.70	5
18.0	± 20%, ± 10%	0.043 ± 0.012 [1.10 ± 0.3]	35	1	21	0.70	5
22.0	± 20%, ± 10%	0.043 ± 0.012 [1.10 ± 0.3]	35	1	19	0.90	5
27.0	± 20%, ± 10%	0.043 ± 0.012 [1.10 ± 0.3]	35	1	17	0.90	5
33.0	± 20%, ± 10%	0.043 ± 0.012 [1.10 ± 0.3]	35	0.4	15	1.05	5

DIMENSIONAL CONFIGURATIONS [Numbers in brackets indicate millimeters]



Dimensional Outline

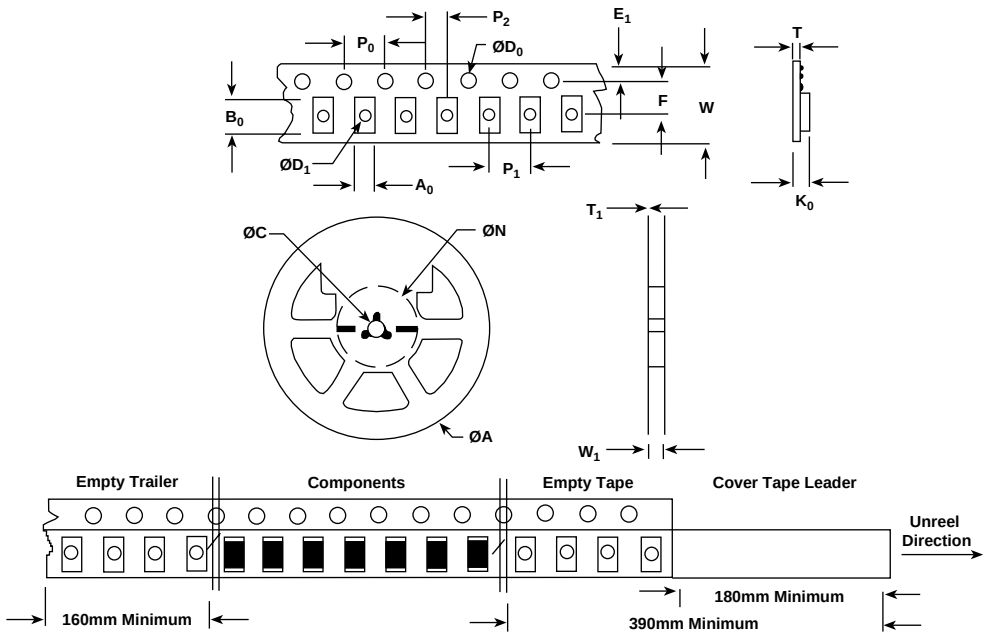


Suggested Pad Layout

A	B	C	D	E	F	G	H
0.126 ± 0.008 [3.2 ± 0.2]	0.063 ± 0.008 [1.6 ± 0.2]	.020 ± 0.012 [0.5 ± 0.3]	See Electrical Specs	0.185 [4.7]	0.047 [1.2]	0.087 [2.2]	0.100 [2.5]

TAPE AND REEL SPECIFICATIONS 1206 SIZE PER EIA-481-1 [Numbers in brackets indicate millimeters]

3000 Piece/Reel



A_0	0.073 ± .004 [1.85 ± 0.1]
B_0	0.135 ± .004 [3.43 ± 0.1]
D_0	0.059 + .005/-0.000 [1.5 + 0.127]
D_1	0.039 Min. [1.0] Min.
E_1	0.069 ± .004 [1.75 ± 0.1]
F	0.138 ± .002 [3.50 ± 0.05]
K_0	0.048 ± .002 [1.22 ± 0.05]
P_0	0.157 ± .004 [4.00 ± 0.1]
P_1	0.157 ± .004 [4.00 ± 0.1]
P_2	0.079 ± .002 [2.00 ± 0.05]
W	0.327 Max. [8.3] Max.
T	0.008 ± .002 [0.2 ± 0.05]
A	7.000 ± .079 [178 ± 2.0]
N	2.500 [63.5]
W_1	0.315 + 0.059/-0.00 [8.00 + 1.50]
T_1	0.079 ± .002 [2.00 ± 0.05]

HOW TO ORDER

ILSB-1206	3.3µH	10%
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE

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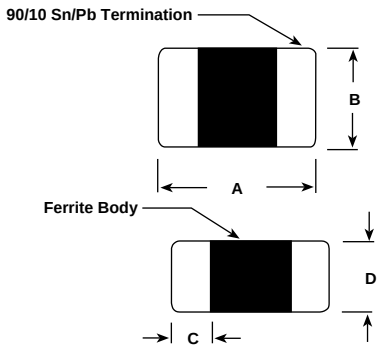

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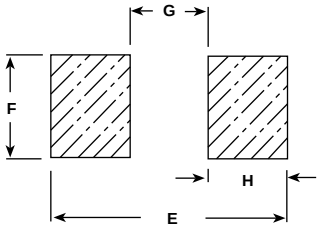

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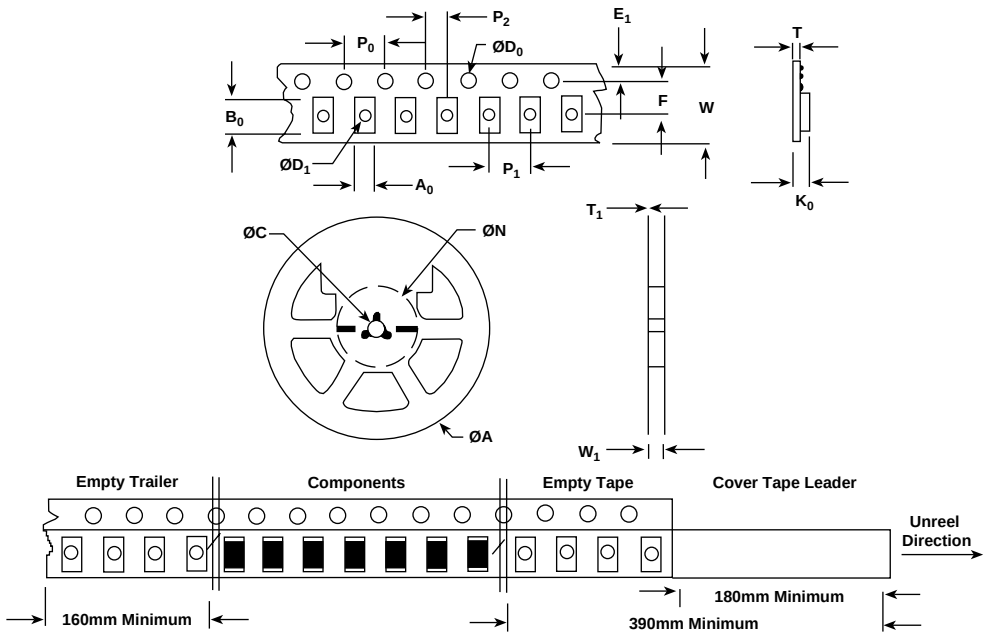

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