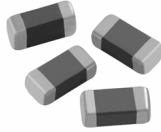


ILSB-1206

Vishay Dale



Monolithic Chip Inductors



MECHANICAL SPECIFICATIONS

Solderability: 90% coverage after 5 second dip in 235°C solder following 60 second preheat at 120°C to 150°C and type R flux dip.

Resistance To Solder Heat: 10 seconds in 260°C solder after preheat and flux per above.

Termination: 90/10 Sn/Pb.

Terminal Strength: 0.1kg for 30 seconds.

Beam Strength: 2.5kg.

FEATURES

- High reliability.
- Surface mountable.
- Magnetically self shielded.
- Nickel barrier plating virtually eliminates silver migration.

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature: - 55°C to + 125°C.

Thermal Shock: - 40°C to + 85°C.

Humidity: 90% RH at 40°C, 1000 hours at full rated current.

Load Life: 85°C for 1000 hours full rated current.

STANDARD ELECTRICAL SPECIFICATIONS in inches [millimeters]

INDUCTANCE (μ H) $\pm 10\%$	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	$\pm 20\%$	0.043 $\pm$ 0.012 [1.10 $\pm$ 0.3]	20	50	368	0.15	300
0.068	$\pm 20\%$	0.043 $\pm$ 0.012 [1.10 $\pm$ 0.3]	20	50	322	0.25	300
0.10	$\pm 10\%$	0.043 $\pm$ 0.012 [1.10 $\pm$ 0.3]	20	25	271	0.25	250
0.12	$\pm 10\%$	0.043 $\pm$ 0.012 [1.10 $\pm$ 0.3]	20	25	253	0.30	250
0.15	$\pm 10\%$	0.043 $\pm$ 0.012 [1.10 $\pm$ 0.3]	20	25	230	0.30	250
0.18	$\pm 10\%$	0.043 $\pm$ 0.012 [1.10 $\pm$ 0.3]	20	25	213	0.40	250
0.22	$\pm 10\%$	0.043 $\pm$ 0.012 [1.10 $\pm$ 0.3]	20	25	196	0.40	250
0.27	$\pm 10\%$	0.043 $\pm$ 0.012 [1.10 $\pm$ 0.3]	20	25	173	0.50	250
0.33	$\pm 10\%$	0.043 $\pm$ 0.012 [1.10 $\pm$ 0.3]	20	25	167	0.60	250
0.39	$\pm 10\%$	0.043 $\pm$ 0.012 [1.10 $\pm$ 0.3]	25	25	156	0.50	200
0.47	$\pm 10\%$	0.043 $\pm$ 0.012 [1.10 $\pm$ 0.3]	25	25	144	0.60	200
0.56	$\pm 10\%$	0.043 $\pm$ 0.012 [1.10 $\pm$ 0.3]	25	25	133	0.70	150
0.68	$\pm 10\%$	0.043 $\pm$ 0.012 [1.10 $\pm$ 0.3]	25	25	121	0.80	150
0.82	$\pm 10\%$	0.043 $\pm$ 0.012 [1.10 $\pm$ 0.3]	25	25	115	0.90	150
1.0	$\pm 10\%$	0.043 $\pm$ 0.012 [1.10 $\pm$ 0.3]	45	10	87	0.40	100
1.2	$\pm 10\%$	0.043 $\pm$ 0.012 [1.10 $\pm$ 0.3]	45	10	75	0.50	100
1.5	$\pm 10\%$	0.043 $\pm$ 0.012 [1.10 $\pm$ 0.3]	45	10	69	0.50	50
1.8	$\pm 10\%$	0.043 $\pm$ 0.012 [1.10 $\pm$ 0.3]	45	10	64	0.50	50
2.2	$\pm 10\%$	0.043 $\pm$ 0.012 [1.10 $\pm$ 0.3]	45	10	58	0.50	50
2.7	$\pm 10\%$	0.043 $\pm$ 0.012 [1.10 $\pm$ 0.3]	45	10	52	0.60	50
3.3	$\pm 10\%$	0.043 $\pm$ 0.012 [1.10 $\pm$ 0.3]	45	10	48	0.70	50
3.9	$\pm 10\%$	0.043 $\pm$ 0.012 [1.10 $\pm$ 0.3]	45	10	44	0.80	50
4.7	$\pm 10\%$	0.043 $\pm$ 0.012 [1.10 $\pm$ 0.3]	45	10	41	0.90	50
5.6	$\pm 10\%$	0.043 $\pm$ 0.012 [1.10 $\pm$ 0.3]	45	4	37	0.70	25
6.8	$\pm 10\%$	0.043 $\pm$ 0.012 [1.10 $\pm$ 0.3]	45	4	34	0.80	25
8.2	$\pm 10\%$	0.043 $\pm$ 0.012 [1.10 $\pm$ 0.3]	45	4	30	0.90	25
10.0	$\pm 10\%$	0.043 $\pm$ 0.012 [1.10 $\pm$ 0.3]	45	2	28	1.00	25
12.0	$\pm 10\%$	0.043 $\pm$ 0.012 [1.10 $\pm$ 0.3]	45	2	26	1.05	15
15.0	$\pm 10\%$	0.043 $\pm$ 0.012 [1.10 $\pm$ 0.3]	45	1	22	0.70	5
18.0	$\pm 10\%$	0.043 $\pm$ 0.012 [1.10 $\pm$ 0.3]	45	1	21	0.70	5
22.0	$\pm 10\%$	0.043 $\pm$ 0.012 [1.10 $\pm$ 0.3]	35	1	19	0.90	5
27.0	$\pm 10\%$	0.043 $\pm$ 0.012 [1.10 $\pm$ 0.3]	35	1	17	0.90	5
33.0	$\pm 10\%$	0.043 $\pm$ 0.012 [1.10 $\pm$ 0.3]	35	1	15	1.05	5

DESCRIPTION

ILSB-1206 MODEL	3.3 μ H INDUCTANCE VALUE	10% INDUCTANCE TOLERANCE
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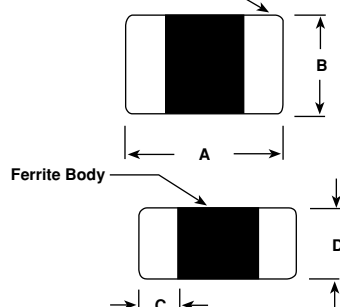
SAP PART NUMBERING GUIDELINES (INTERNAL)

I	L	S	B	1	2	0	6	R	K	3	R	3	K
PRODUCT FAMILY				SIZE				PACKAGE CODE		INDUCTANCE VALUE			TOL.

See the end of this data book for conversion tables

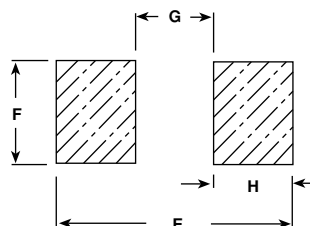
**DIMENSIONS** in inches [millimeters]

90/10 Sn/Pb Termination



Ferrite Body

Dimensional Outline

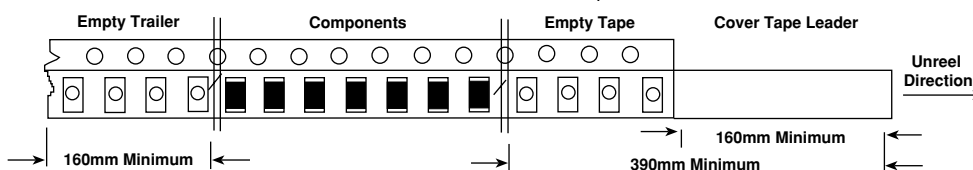
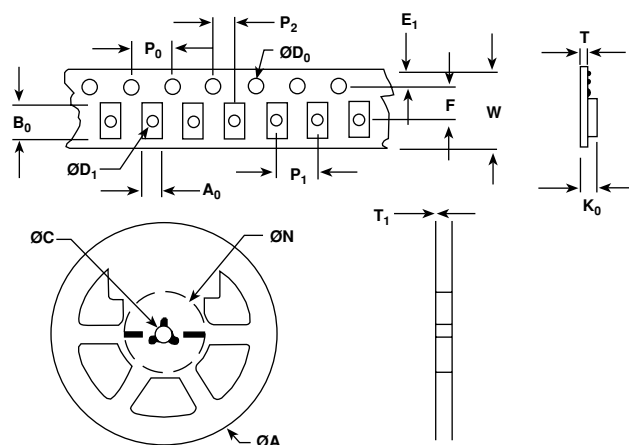


Suggested Pad Layout

A	B	C	D	E	F	G	H
0.126 ± 0.008 [3.2 ± 0.2]	0.063 ± 0.008 [1.6 ± 0.2]	$.020 \pm 0.012$ [0.5 ± 0.3]	0.043 ± 0.012 [1.10 ± 0.3]	0.185 [4.7]	0.070 [1.8]	0.087 [2.2]	0.047 [1.2]

TAPE AND REEL SPECIFICATIONS 1206 SIZE PER EIA-481-1 in inches [millimeters]

3000 Piece/Reel



A ₀	$0.073 \pm .004$ [1.85 ± 0.1]
B ₀	$0.135 \pm .004$ [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	$0.069 \pm .004$ [1.75 ± 0.1]
F	$0.138 \pm .002$ [3.50 ± 0.05]
K ₀	$0.048 \pm .002$ [1.22 ± 0.05]
P ₀	$0.157 \pm .004$ [4.00 ± 0.1]
P ₁	$0.157 \pm .004$ [4.00 ± 0.1]
P ₂	$0.079 \pm .002$ [2.00 ± 0.05]
W	0.327 Max. [8.3] Max.
T	$0.008 \pm .002$ [0.2 ± 0.05]
A	$7.000 \pm .079$ [178 ± 2.0]
N	2.500 [63.5]
W ₁	$0.315 + 0.059/-0.00$ [8.00 + 1.50]
T ₁	$0.079 \pm .002$ [2.00 ± 0.05]