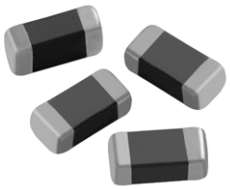
Monolithic Chip Inductors



FEATURES

- High reliability
- Surface mountable
- Magnetically self shielded
- Nickel barrier plating virtually eliminates silver migration
- 100 % lead (Pb)-free and RoHS compliant

Pb-free

RoHS COMPLIANT

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: 100 % Sn

Terminal Strength: 0.1 kg for 30 seconds

Beam Strength: 2.5 kg

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

INDUCTANCE (µH) ± 10 %	TOLERANCE	THICKNESS "D" Inches [mm]	Q (Min.)	TEST FREQUENCY L & Q (MHz)	MIN. SELF- RESONANT FREQUENCY (MHz)	MAXIMUM DCR (Ohms)	RATED DC CURRENT (mA)
0.047	± 20 %	0.043 ± 0.012 [1.10 ± 0.3]	20	50	368	0.15	300
0.068	± 20 %	0.043 ± 0.012 [1.10 ± 0.3]	20	50	322	0.25	300
0.10	± 10 %	0.043 ± 0.012 [1.10 ± 0.3]	20	25	271	0.25	250
0.12	± 10 %	0.043 ± 0.012 [1.10 ± 0.3]	20	25	253	0.30	250
0.15	± 10 %	0.043 ± 0.012 [1.10 ± 0.3]	20	25	230	0.30	250
0.18	± 10 %	0.043 ± 0.012 [1.10 ± 0.3]	20	25	213	0.40	250
0.22	± 10 %	0.043 ± 0.012 [1.10 ± 0.3]	20	25	196	0.40	250
0.27	± 10 %	0.043 ± 0.012 [1.10 ± 0.3]	20	25	173	0.50	250
0.33	± 10 %	0.043 ± 0.012 [1.10 ± 0.3]	20	25	167	0.60	250
0.39	± 10 %	0.043 ± 0.012 [1.10 ± 0.3]	25	25	156	0.50	200
0.47	± 10 %	0.043 ± 0.012 [1.10 ± 0.3]	25	25	144	0.60	200
0.56	± 10 %	0.043 ± 0.012 [1.10 ± 0.3]	25	25	133	0.70	150
0.68	± 10 %	0.043 ± 0.012 [1.10 ± 0.3]	25	25	121	0.80	150
0.82	± 10 %	0.043 ± 0.012 [1.10 ± 0.3]	25	25	115	0.90	150
1.0	± 10 %	0.043 ± 0.012 [1.10 ± 0.3]	45	10	87	0.40	100
1.2	± 10 %	0.043 ± 0.012 [1.10 ± 0.3]	45	10	75	0.50	100
1.5	± 10 %	0.043 ± 0.012 [1.10 ± 0.3]	45	10	69	0.50	50
1.8	± 10 %	0.043 ± 0.012 [1.10 ± 0.3]	45	10	64	0.50	50
2.2	± 10 %	0.043 ± 0.012 [1.10 ± 0.3]	45	10	58	0.50	50
2.7	± 10 %	0.043 ± 0.012 [1.10 ± 0.3]	45	10	52	0.60	50
3.3	± 10 %	0.043 ± 0.012 [1.10 ± 0.3]	45	10	48	0.70	50
3.9	± 10 %	0.043 ± 0.012 [1.10 ± 0.3]	45	10	44	0.80	50
4.7	± 10 %	0.043 ± 0.012 [1.10 ± 0.3]	45	10	41	0.90	50
5.6	± 10 %	0.043 ± 0.012 [1.10 ± 0.3]	45	4	37	0.70	25
6.8	± 10 %	0.043 ± 0.012 [1.10 ± 0.3]	45	4	34	0.80	25
8.2	± 10 %	0.043 ± 0.012 [1.10 ± 0.3]	45	4	30	0.90	25
10.0	± 10 %	0.043 ± 0.012 [1.10 ± 0.3]	45	2	28	1.00	25
12.0	± 10 %	0.043 ± 0.012 [1.10 ± 0.3]	45	2	26	1.05	15
15.0	± 10 %	0.043 ± 0.012 [1.10 ± 0.3]	45	1	22	0.70	5
18.0	± 10 %	0.043 ± 0.012 [1.10 ± 0.3]	45	1	21	0.70	5
22.0	± 10 %	0.043 ± 0.012 [1.10 ± 0.3]	35	1	19	0.90	5
27.0	± 10 %	0.043 ± 0.012 [1.10 ± 0.3]	35	1	17	0.90	5
33.0	± 10 %	0.043 ± 0.012 [1.10 ± 0.3]	35	1	15	1.05	5

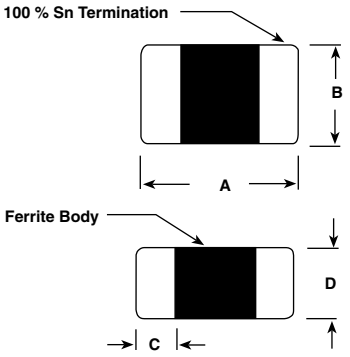
DESCRIPTION

ILSB-1206	3.3 µH	± 10 %	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

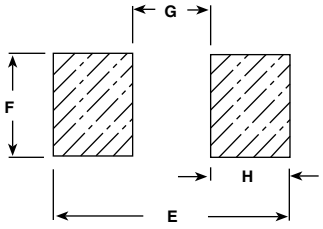
GLOBAL PART NUMBER

I	L	S	B	1	2	0	6	E	R	3	R	3	K
MODEL				SIZE				PACKAGE CODE		INDUCTANCE VALUE			INDUCTANCE TOLERANCE

DIMENSIONS in inches [millimeters]



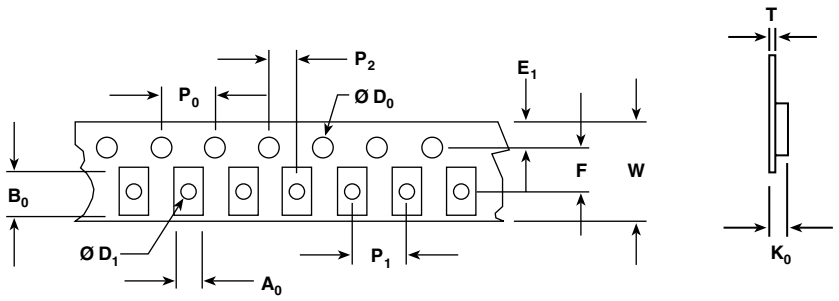
Dimensional Outline

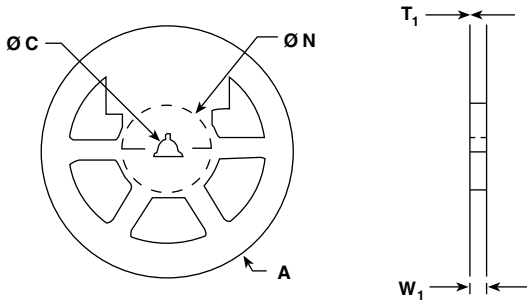


Suggested Pad Layout

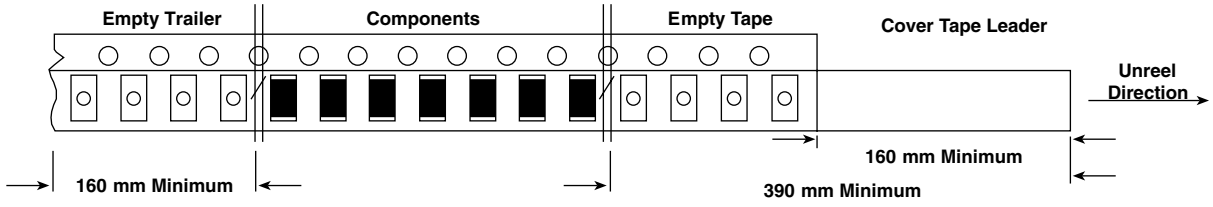
A	B	C	D	E	F	G	H
0.126 ± 0.008 [3.2 ± 0.2]	0.063 ± 0.008 [1.6 ± 0.2]	0.020 ± 0.012 [0.5 ± 0.3]	0.043 ± 0.012 [1.10 ± 0.3]	0.185 [4.7]	0.070 [1.8]	0.087 [2.2]	0.047 [1.2]

TAPE AND REEL SPECIFICATIONS 0603 SIZE PER EIA-481-1 in inches [millimeters]





A_0	0.073 ± 0.004 [1.85 ± 0.1]
B_0	0.135 ± 0.004 [3.43 ± 0.1]
D_0	0.059 + 0.005/-0.000 [1.5 + 0.127]
D_1	0.039 Min. [1.0] Min.
E_1	0.069 ± 0.004 [1.75 ± 0.1]
F	0.138 ± 0.002 [3.50 ± 0.05]
K_0	0.048 ± 0.002 [1.22 ± 0.05]
P_0	0.157 ± 0.004 [4.00 ± 0.1]
P_1	0.157 ± 0.004 [4.00 ± 0.1]
P_2	0.079 ± 0.002 [2.00 ± 0.05]
W	0.327 Max. [8.3] Max.
T	0.008 ± 0.002 [0.2 ± 0.05]
A	7.000 ± 0.079 [178 ± 2.0]
N	2.500 [63.5]
W_1	0.315 + 0.059/- 0.00 [8.00 + 1.50]
T_1	0.079 ± 0.002 [2.00 ± 0.05]



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