

Monolithic Chip Inductors

**FEATURES**

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

ELECTRICAL SPECIFICATIONS

Inductance Range: .047 μ H to 27 μ H.

Inductance Tolerance: $\pm 20\%$ for .047 μ H to .082 μ H.
 $\pm 10\%$ or $\pm 20\%$ for .10 μ H to 27 μ H.

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 $\pm 85^\circ\text{C}$, 1000 hours. $\Delta L \leq \pm 5\%$. $\Delta Q \leq \pm 30\%$.

Thermal Shock: Meets requirements of MIL-STD-202, Method 107, 100 cycles - 25°C to + 85°C. $\Delta L \leq \pm 5\%$.
 $\Delta Q \leq \pm 30\%$.

Moisture Resistance: Store at + 40°C and 90% minimum relative humidity for 1000 hours. $\Delta L \leq \pm 5\%$. $\Delta Q \leq \pm 30\%$.

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.

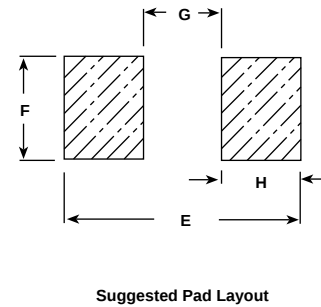
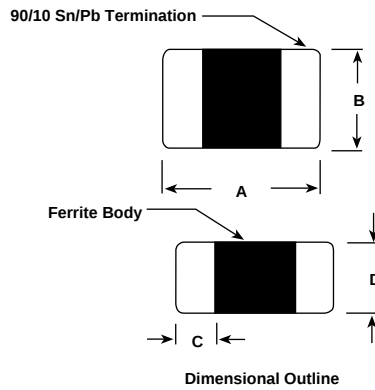
Terminal Strength: 1.6 Kg, 30 seconds.

Transverse Rupture: 1.0 Kg with 1.4mm spacing.

STANDARD ELECTRICAL SPECIFICATIONS [Numbers in brackets indicate millimeters]

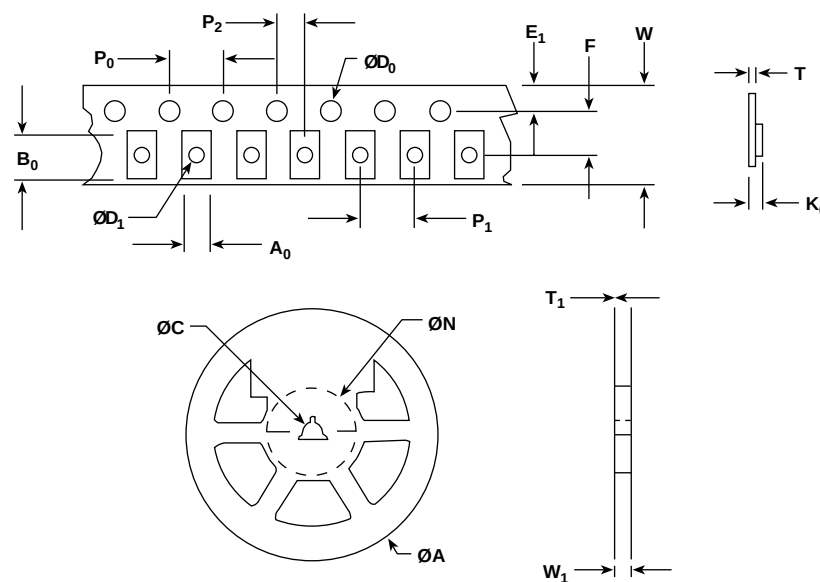
INDUCTANCE (μ H) $\pm 10\%$	TOLERANCE	THICKNESS "D" (Inches)	Q (Min.)	TEST FREQUENCY L & Q (MHz)	MINIMUM SELF-RESONANT FREQUENCY (MHz)	MAXIMUM DCR (Ohms)	RATED DC CURRENT (mA)
0.047	$\pm 20\%$	0.035 $\pm$ 0.008 [0.90 $\pm$ 0.2]	15	50	320	0.20	300
0.056	$\pm 20\%$	0.035 $\pm$ 0.008 [0.90 $\pm$ 0.2]	15	50	300	0.20	300
0.068	$\pm 20\%$	0.035 $\pm$ 0.008 [0.90 $\pm$ 0.2]	15	50	280	0.20	300
0.082	$\pm 20\%$	0.035 $\pm$ 0.008 [0.90 $\pm$ 0.2]	15	50	255	0.20	300
0.10	$\pm 20\%$, $\pm 10\%$	0.035 $\pm$ 0.008 [0.90 $\pm$ 0.2]	20	25	279	0.30	250
0.12	$\pm 20\%$, $\pm 10\%$	0.035 $\pm$ 0.008 [0.90 $\pm$ 0.2]	20	25	253	0.30	250
0.15	$\pm 20\%$, $\pm 10\%$	0.035 $\pm$ 0.008 [0.90 $\pm$ 0.2]	20	25	230	0.40	250
0.18	$\pm 20\%$, $\pm 10\%$	0.035 $\pm$ 0.008 [0.90 $\pm$ 0.2]	20	25	213	0.40	250
0.22	$\pm 20\%$, $\pm 10\%$	0.035 $\pm$ 0.008 [0.90 $\pm$ 0.2]	20	25	196	0.50	250
0.27	$\pm 20\%$, $\pm 10\%$	0.035 $\pm$ 0.008 [0.90 $\pm$ 0.2]	20	25	173	0.50	250
0.33	$\pm 20\%$, $\pm 10\%$	0.035 $\pm$ 0.008 [0.90 $\pm$ 0.2]	20	25	167	0.55	250
0.39	$\pm 20\%$, $\pm 10\%$	0.035 $\pm$ 0.008 [0.90 $\pm$ 0.2]	25	25	156	0.65	200
0.47	$\pm 20\%$, $\pm 10\%$	0.049 $\pm$ 0.008 [1.25 $\pm$ 0.2]	25	25	144	0.65	200
0.56	$\pm 20\%$, $\pm 10\%$	0.049 $\pm$ 0.008 [1.25 $\pm$ 0.2]	25	25	133	0.75	150
0.68	$\pm 20\%$, $\pm 10\%$	0.049 $\pm$ 0.008 [1.25 $\pm$ 0.2]	25	25	121	0.80	150
0.82	$\pm 20\%$, $\pm 10\%$	0.049 $\pm$ 0.008 [1.25 $\pm$ 0.2]	25	25	115	1.00	150
1.0	$\pm 20\%$, $\pm 10\%$	0.035 $\pm$ 0.008 [0.90 $\pm$ 0.2]	30	10	87	0.40	50
1.2	$\pm 20\%$, $\pm 10\%$	0.035 $\pm$ 0.008 [0.90 $\pm$ 0.2]	30	10	75	0.50	50
1.5	$\pm 20\%$, $\pm 10\%$	0.035 $\pm$ 0.008 [0.90 $\pm$ 0.2]	30	10	69	0.50	50
1.8	$\pm 20\%$, $\pm 10\%$	0.035 $\pm$ 0.008 [0.90 $\pm$ 0.2]	30	10	64	0.60	50
2.2	$\pm 20\%$, $\pm 10\%$	0.035 $\pm$ 0.008 [0.90 $\pm$ 0.2]	30	10	58	0.65	30
2.7	$\pm 20\%$, $\pm 10\%$	0.049 $\pm$ 0.008 [1.25 $\pm$ 0.2]	30	10	52	0.75	30
3.3	$\pm 20\%$, $\pm 10\%$	0.049 $\pm$ 0.008 [1.25 $\pm$ 0.2]	30	10	48	0.80	30
3.9	$\pm 20\%$, $\pm 10\%$	0.049 $\pm$ 0.008 [1.25 $\pm$ 0.2]	30	10	44	0.90	30
4.7	$\pm 20\%$, $\pm 10\%$	0.049 $\pm$ 0.008 [1.25 $\pm$ 0.2]	30	10	41	1.00	30
5.6	$\pm 20\%$, $\pm 10\%$	0.049 $\pm$ 0.008 [1.25 $\pm$ 0.2]	30	4	37	0.90	15
6.8	$\pm 20\%$, $\pm 10\%$	0.049 $\pm$ 0.008 [1.25 $\pm$ 0.2]	30	4	34	1.00	15
8.2	$\pm 20\%$, $\pm 10\%$	0.049 $\pm$ 0.008 [1.25 $\pm$ 0.2]	30	4	30	1.10	15
10.0	$\pm 20\%$, $\pm 10\%$	0.049 $\pm$ 0.008 [1.25 $\pm$ 0.2]	30	2	28	1.15	15
12.0	$\pm 20\%$, $\pm 10\%$	0.049 $\pm$ 0.008 [1.25 $\pm$ 0.2]	30	2	26	1.25	15
15.0	$\pm 20\%$, $\pm 10\%$	0.049 $\pm$ 0.008 [1.25 $\pm$ 0.2]	30	1	22	0.80	5
18.0	$\pm 20\%$, $\pm 10\%$	0.049 $\pm$ 0.008 [1.25 $\pm$ 0.2]	30	1	21	0.90	5
22.0	$\pm 20\%$, $\pm 10\%$	0.049 $\pm$ 0.008 [1.25 $\pm$ 0.2]	30	1	19	1.10	5
27.0	$\pm 20\%$, $\pm 10\%$	0.049 $\pm$ 0.008 [1.25 $\pm$ 0.2]	30	1	17	1.15	5

DIMENSIONAL CONFIGURATIONS [Numbers in brackets indicate millimeters]

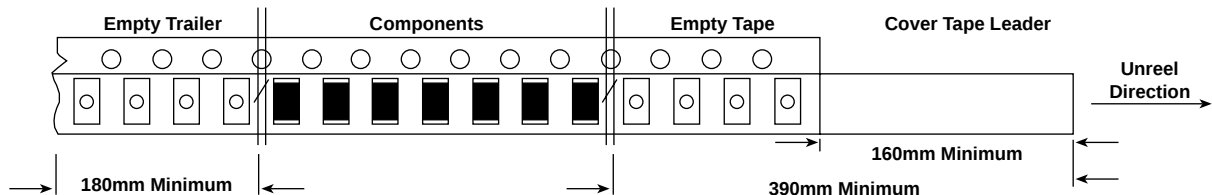


A	B	C	D	E	F	G	H
0.079 ± 0.008 [2.0 ± 0.2]	0.049 ± 0.008 [1.25 ± 0.2]	0.020 ± 0.08 [0.5 ± 0.2]	See Electrical Specs	0.120 [3.0]	0.051 [1.3]	0.060 [1.5]	0.040 [1.0]

TAPE AND REEL SPECIFICATIONS 0805 SIZE PER EIA-481-1 [Numbers in brackets indicate millimeters]



A ₀	$0.059 \pm .004$ [1.50 ± 0.1]
B ₀	$0.092 \pm .004$ [2.34 ± 0.1]
D ₀	$0.059 \pm .005/- 0.000$ [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	$0.049 \pm .002$ [1.24 ± 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	$7.000 \pm .078$ [178 ± 2.0]
N	2.500 [63.5]
C	$0.512 \pm .020$ [13.00 ± 0.50]
W ₁	$0.315 \pm 0.059/- 0.00$ [8.00 ± 1.50]
T ₁	$0.079 \pm .002$ [2.00 ± 0.05]



HOW TO ORDER

ILSB-0805 MODEL	3.3μH INDUCTANCE VALUE	10% INDUCTANCE TOLERANCE
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