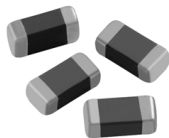


Monolithic Chip Inductors



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: 0.6kg for 30 seconds.

Beam Strength: 1.0kg.

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	$\pm 20\%$	0.035 ± 0.008 [0.90 $\pm$ 0.2]	15	50	320	0.20	300
0.056	$\pm 20\%$	0.035 ± 0.008 [0.90 $\pm$ 0.2]	15	50	300	0.20	300
0.068	$\pm 20\%$	0.035 ± 0.008 [0.90 $\pm$ 0.2]	15	50	280	0.20	300
0.082	$\pm 20\%$	0.035 ± 0.008 [0.90 $\pm$ 0.2]	15	50	255	0.20	300
0.10	$\pm 10\%$	0.035 ± 0.008 [0.90 $\pm$ 0.2]	20	25	279	0.30	250
0.12	$\pm 10\%$	0.035 ± 0.008 [0.90 $\pm$ 0.2]	20	25	253	0.30	250
0.15	$\pm 10\%$	0.035 ± 0.008 [0.90 $\pm$ 0.2]	20	25	230	0.40	250
0.18	$\pm 10\%$	0.035 ± 0.008 [0.90 $\pm$ 0.2]	20	25	213	0.40	250
0.22	$\pm 10\%$	0.035 ± 0.008 [0.90 $\pm$ 0.2]	20	25	196	0.50	250
0.27	$\pm 10\%$	0.035 ± 0.008 [0.90 $\pm$ 0.2]	20	25	173	0.50	250
0.33	$\pm 10\%$	0.035 ± 0.008 [0.90 $\pm$ 0.2]	20	25	167	0.55	250
0.39	$\pm 10\%$	0.035 ± 0.008 [0.90 $\pm$ 0.2]	25	25	156	0.65	200
0.47	$\pm 10\%$	0.049 ± 0.008 [1.25 $\pm$ 0.2]	25	25	144	0.65	200
0.56	$\pm 10\%$	0.049 ± 0.008 [1.25 $\pm$ 0.2]	25	25	133	0.75	150
0.68	$\pm 10\%$	0.049 ± 0.008 [1.25 $\pm$ 0.2]	25	25	121	0.80	150
0.82	$\pm 10\%$	0.049 ± 0.008 [1.25 $\pm$ 0.2]	25	25	115	1.00	150
1.0	$\pm 10\%$	0.035 ± 0.008 [0.90 $\pm$ 0.2]	45	10	87	0.40	50
1.2	$\pm 10\%$	0.035 ± 0.008 [0.90 $\pm$ 0.2]	45	10	75	0.50	50
1.5	$\pm 10\%$	0.035 ± 0.008 [0.90 $\pm$ 0.2]	45	10	69	0.50	50
1.8	$\pm 10\%$	0.035 ± 0.008 [0.90 $\pm$ 0.2]	45	10	64	0.60	50
2.2	$\pm 10\%$	0.035 ± 0.008 [0.90 $\pm$ 0.2]	45	10	58	0.65	30
2.7	$\pm 10\%$	0.049 ± 0.008 [1.25 $\pm$ 0.2]	45	10	52	0.75	30
3.3	$\pm 10\%$	0.049 ± 0.008 [1.25 $\pm$ 0.2]	45	10	48	0.80	30
3.9	$\pm 10\%$	0.049 ± 0.008 [1.25 $\pm$ 0.2]	45	10	44	0.90	30
4.7	$\pm 10\%$	0.049 ± 0.008 [1.25 $\pm$ 0.2]	45	10	41	1.00	30
5.6	$\pm 10\%$	0.049 ± 0.008 [1.25 $\pm$ 0.2]	45	4	37	0.90	15
6.8	$\pm 10\%$	0.049 ± 0.008 [1.25 $\pm$ 0.2]	45	4	34	1.00	15
8.2	$\pm 10\%$	0.049 ± 0.008 [1.25 $\pm$ 0.2]	45	4	30	1.10	15
10.0	$\pm 10\%$	0.049 ± 0.008 [1.25 $\pm$ 0.2]	50	2	28	1.15	15
12.0	$\pm 10\%$	0.049 ± 0.008 [1.25 $\pm$ 0.2]	50	2	26	1.25	15
15.0	$\pm 10\%$	0.049 ± 0.008 [1.25 $\pm$ 0.2]	30	1	22	0.80	5
18.0	$\pm 10\%$	0.049 ± 0.008 [1.25 $\pm$ 0.2]	30	1	21	0.90	5
22.0	$\pm 10\%$	0.049 ± 0.008 [1.25 $\pm$ 0.2]	30	1	19	1.10	5
27.0	$\pm 10\%$	0.049 ± 0.008 [1.25 $\pm$ 0.2]	30	1	17	1.15	5
33.0	$\pm 10\%$	0.049 ± 0.008 [1.25 $\pm$ 0.2]	30	0.4	13	1.25	5

DESCRIPTION

ILSB-0805	3.3 μ H	10%
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE

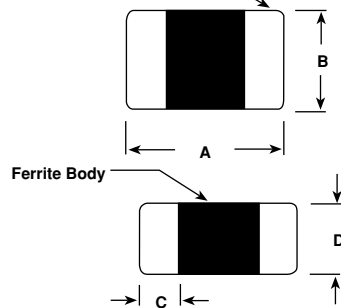
SAP PART NUMBERING GUIDELINES (INTERNAL)

I	L	S	B	0	8	0	5	R	K	3	R	3	K
PRODUCT FAMILY				SIZE				PACKAGE CODE		INDUCTANCE VALUE			TOL.

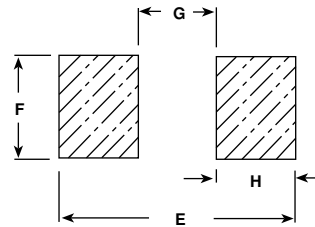
See the end of this data book for conversion tables

DIMENSIONS in inches [millimeters]

90/10 Sn/Pb Termination



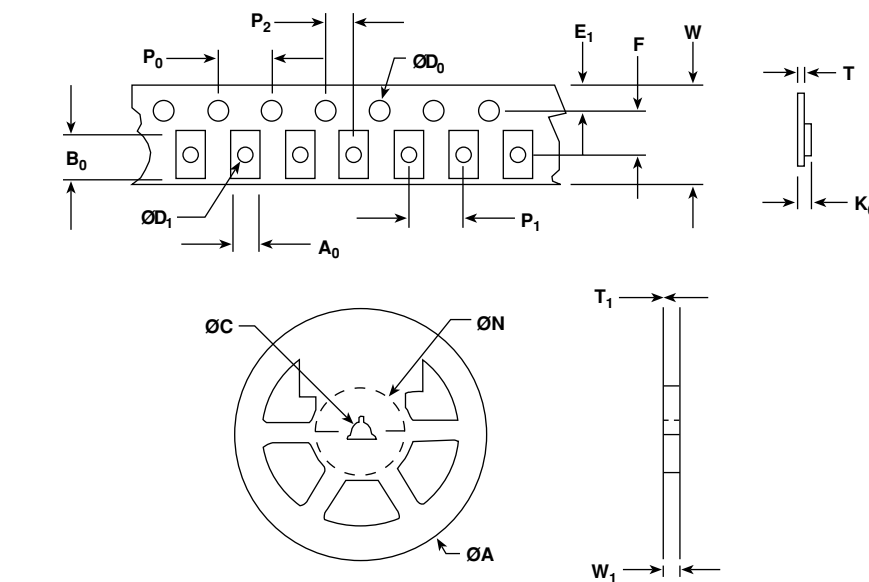
Dimensional Outline



Suggested Pad Layout

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 ± 0.12 [0.5 ± 0.3]	See Electrical Specs	0.120 [3.0]	0.051 [1.3]	0.040 [1.0]	0.040 [1.0]

TAPE AND REEL SPECIFICATIONS 0805 SIZE PER EIA-481-1 in inches [millimeters]



A ₀	$0.059 \pm .004$ [1.50 ± 0.1]
B ₀	$0.092 \pm .004$ [2.34 ± 0.1]
D ₀	$0.059 + .005/- 0.000$ [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	$0.315 + 0.059/- 0.00$ [8.00 + 1.50]
T ₁	$0.079 \pm .002$ [2.00 ± 0.05]

