

## 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 ( $\mu$ 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	3.3 $\mu$ H	10%
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE

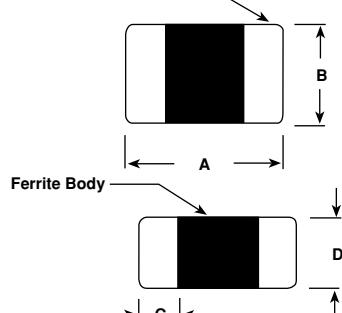
### SAP PART NUMBERING GUIDELINES (INTERNAL)

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

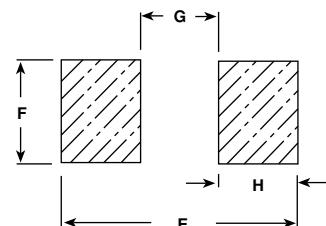
See the end of this data book for conversion tables

**DIMENSIONS** in inches [millimeters]

90/10 Sn/Pb Termination



Dimensional Outline

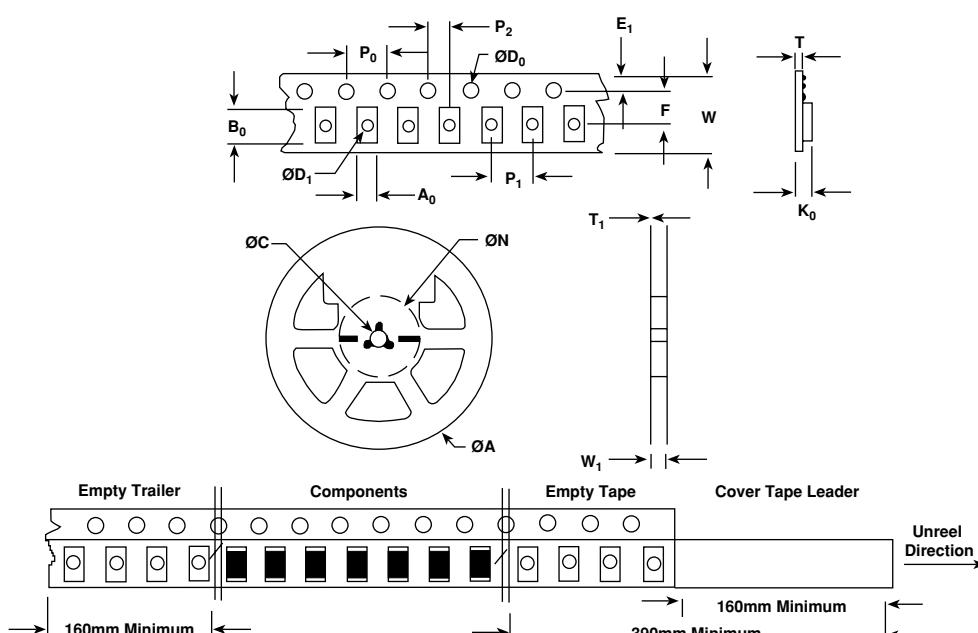


Suggested Pad Layout

A	B	C	D	E	F	G	H
$0.126 \pm 0.008$ [ $3.2 \pm 0.2$ ]	$0.063 \pm 0.008$ [ $1.6 \pm 0.2$ ]	$.020 \pm 0.012$ [ $0.5 \pm 0.3$ ]	$0.043 \pm 0.012$ [ $1.10 \pm 0.3$ ]	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



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