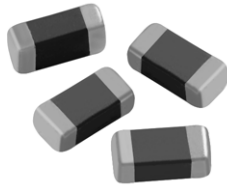


## Monolithic Chip Inductors



### FEATURES

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



**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:** 0.6 kg for 30 seconds  
**Beam Strength:** 1.0 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)	MAX. DCR (Ohms)	RATED DC CURRENT (mA)	
0.047	± 20 %	0.035 ± 0.008 [0.90 ± 0.2]	15	50	320	0.20	300	
0.056	± 20 %	0.035 ± 0.008 [0.90 ± 0.2]	15	50	300	0.20	300	
0.068	± 20 %	0.035 ± 0.008 [0.90 ± 0.2]	15	50	280	0.20	300	
0.082	± 20 %	0.035 ± 0.008 [0.90 ± 0.2]	15	50	255	0.20	300	
0.10	± 10 %	0.035 ± 0.008 [0.90 ± 0.2]	20	25	279	0.30	250	
0.12	± 10 %	0.035 ± 0.008 [0.90 ± 0.2]	20	25	253	0.30	250	
0.15	± 10 %	0.035 ± 0.008 [0.90 ± 0.2]	20	25	230	0.40	250	
0.18	± 10 %	0.035 ± 0.008 [0.90 ± 0.2]	20	25	213	0.40	250	
0.22	± 10 %	0.035 ± 0.008 [0.90 ± 0.2]	20	25	196	0.50	250	
0.27	± 10 %	0.035 ± 0.008 [0.90 ± 0.2]	20	25	173	0.50	250	
0.33	± 10 %	0.035 ± 0.008 [0.90 ± 0.2]	20	25	167	0.55	250	
0.39	± 10 %	0.035 ± 0.008 [0.90 ± 0.2]	25	25	156	0.65	200	
0.47	± 10 %	0.035 ± 0.008 [0.90 ± 0.2]	25	25	144	0.65	200	
0.56	± 10 %	0.035 ± 0.008 [0.90 ± 0.2]	25	25	133	0.75	150	
0.68	± 10 %	0.035 ± 0.008 [0.90 ± 0.2]	25	25	121	0.80	150	
0.82	± 10 %	0.035 ± 0.008 [0.90 ± 0.2]	25	25	115	1.00	150	
1.0	± 10 %	0.035 ± 0.008 [0.90 ± 0.2]	45	10	87	0.40	50	
1.2	± 10 %	0.035 ± 0.008 [0.90 ± 0.2]	45	10	75	0.50	50	
1.5	± 10 %	0.035 ± 0.008 [0.90 ± 0.2]	45	10	69	0.50	50	
1.8	± 10 %	0.035 ± 0.008 [0.90 ± 0.2]	45	10	64	0.60	50	
2.2	± 10 %	0.035 ± 0.008 [0.90 ± 0.2]	45	10	58	0.65	30	
2.7	± 10 %	0.049 ± 0.008 [1.25 ± 0.2]	45	10	52	0.75	30	
3.3	± 10 %	0.049 ± 0.008 [1.25 ± 0.2]	45	10	48	0.80	30	
3.9	± 10 %	0.049 ± 0.008 [1.25 ± 0.2]	45	10	44	0.90	30	
4.7	± 10 %	0.049 ± 0.008 [1.25 ± 0.2]	45	10	41	1.00	30	
5.6	± 10 %	0.049 ± 0.008 [1.25 ± 0.2]	45	4	37	0.90	15	
6.8	± 10 %	0.049 ± 0.008 [1.25 ± 0.2]	45	4	34	1.00	15	
8.2	± 10 %	0.049 ± 0.008 [1.25 ± 0.2]	45	4	30	1.10	15	
10.0	± 10 %	0.049 ± 0.008 [1.25 ± 0.2]	50	2	28	1.15	15	
12.0	± 10 %	0.049 ± 0.008 [1.25 ± 0.2]	50	2	26	1.25	15	
15.0	± 10 %	0.049 ± 0.008 [1.25 ± 0.2]	30	1	22	0.80	5	
18.0	± 10 %	0.049 ± 0.008 [1.25 ± 0.2]	30	1	21	0.90	5	
22.0	± 10 %	0.049 ± 0.008 [1.25 ± 0.2]	30	1	19	1.10	5	
27.0	± 10 %	0.049 ± 0.008 [1.25 ± 0.2]	30	1	17	1.15	5	
33.0	± 10 %	0.049 ± 0.008 [1.25 ± 0.2]	30	0.4	13	1.25	5	

DESCRIPTION				
ILSB-0805 MODEL	3.3 µH INDUCTANCE VALUE	± 10 % INDUCTANCE TOLERANCE	ER PACKAGE CODE	e3 JEDEC LEAD (Pb)-FREE STANDARD
<b>GLOBAL PART NUMBER</b>				
I L S B	0 8 0 5	E R	3 R 3	K
MODEL	SIZE	PACKAGE CODE	INDUCTANCE VALUE	INDUCTANCE TOLERANCE

DIMENSIONS in inches [millimeters]							
<p>100 % Sn Termination</p> <p>Ferrite Body</p> <p>Dimensional Outline</p> <p>Suggested Pad Layout</p>							
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]		
<p>Diagram showing dimensions A<sub>0</sub>, B<sub>0</sub>, D<sub>0</sub>, D<sub>1</sub>, E<sub>1</sub>, F, W, T, K<sub>0</sub>, P<sub>0</sub>, P<sub>1</sub>, P<sub>2</sub>, ØD<sub>0</sub>, ØD<sub>1</sub>, A<sub>0</sub>, P<sub>1</sub>, ØC, ØN, ØA, T<sub>1</sub>, W<sub>1</sub>.</p> <p>Diagram showing ØC, ØN, ØA.</p> <p>Diagram showing T<sub>1</sub>, W<sub>1</sub>.</p> <p>Diagram showing Empty Trailer, Components, Empty Tape, Cover Tape Leader, Unreel Direction, 160 mm Minimum, 390 mm Minimum.</p>	A <sub>0</sub>	0.059 ± 0.004 [1.50 ± 0.1]
	B <sub>0</sub>	0.092 ± 0.004 [2.34 ± 0.1]
	D <sub>0</sub>	0.059 + 0.005/- 0.000 [1.5 + 0.127]
	D <sub>1</sub>	0.039 Min. [1.0 Min.]
	E <sub>1</sub>	0.069 ± 0.004 [1.75 ± 0.1]
	F	0.138 ± 0.002 [3.50 ± 0.05]
	K <sub>0</sub>	0.049 ± 0.002 [1.24 ± 0.05]
	P <sub>0</sub>	0.157 ± 0.004 [4.00 ± 0.1]
	P <sub>1</sub>	0.157 ± 0.004 [4.00 ± 0.1]
	P <sub>2</sub>	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 ± 0.078 [178 ± 2.0]
	N	2.500 [63.5]
	C	0.512 ± 0.020 [13.00 + 0.50]
	W <sub>1</sub>	0.315 + 0.059/- 0.00 [8.00 + 1.50]
T <sub>1</sub>	0.079 ± 0.002 [2.00 ± 0.05]	



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