



Vishay Dale

RoHS

# **Monolithic Chip Inductors**



### **MECHANICAL SPECIFICATIONS**

Solderability: 90 % coverage after 5 s dip in 235 °C solder following 60 s preheat at 120 °C to 150 °C and type R flux dip Resistance to Solder Heat: 10 s in 260 °C solder, after preheat and flux per above Termination: 100 % Sn Terminal Strength: 0.1 kg for 30 s

STANDARD ELECTRICAL SPECIFICATIONS

## Beam Strength: 2.5 kg

#### **FEATURES**

- High reliability
- Surface mountable
- Magnetically self shielded
- Nickel barrier plating virtually eliminates silver COMPLIANT migration HALOGEN
- Material categorization: for definitions of FREE compliance please see <u>www.vishay.com/doc?99912</u>

### **ENVIRONMENTAL SPECIFICATIONS**

**Operating Temperature:** -55 °C to +125 °C **Thermal Shock:** -40 °C to +85 °C **Humidity:** 90 % RH at 40 °C, 1000 h at full rated current **Load Life:** 85 °C for 1000 h at full rated current

INDUCTANCE		THICKNESS "D"	TEST FREQ. (MHz)	Q	SRF MIN.	DCR MAX.	RATED DC CURRENT
(μH)	TOL.	(INCHES [mm])	L AND Q	MĨN.	(MHz)	(Ω)	(mA)
0.047	20 %	0.043 ± 0.012 [1.10 ± 0.3]	50	20	368	0.15	300
0.068	20 %	0.043 ± 0.012 [1.10 ± 0.3]	50	20	322	0.25	300
0.10	10 %	0.043 ± 0.012 [1.10 ± 0.3]	25	20	271	0.25	250
0.12	10 %	0.043 ± 0.012 [1.10 ± 0.3]	25	20	253	0.30	250
0.15	10 %	0.043 ± 0.012 [1.10 ± 0.3]	25	20	230	0.30	250
0.18	10 %	0.043 ± 0.012 [1.10 ± 0.3]	25	20	213	0.40	250
0.22	10 %	0.043 ± 0.012 [1.10 ± 0.3]	25	20	196	0.40	250
0.27	10 %	0.043 ± 0.012 [1.10 ± 0.3]	25	20	173	0.50	250
0.33	10 %	0.043 ± 0.012 [1.10 ± 0.3]	25	20	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
0.68	10 %	0.043 ± 0.012 [1.10 ± 0.3]	25	25	121	0.80	150
1.0	10 %	0.043 ± 0.012 [1.10 ± 0.3]	10	45	87	0.40	100
1.2	10 %	0.043 ± 0.012 [1.10 ± 0.3]	10	45	75	0.50	100
1.5	10 %	0.043 ± 0.012 [1.10 ± 0.3]	10	45	69	0.50	50
1.8	10 %	0.043 ± 0.012 [1.10 ± 0.3]	10	45	64	0.50	50
2.2	10 %	0.043 ± 0.012 [1.10 ± 0.3]	10	45	58	0.50	50
3.3	10 %	0.043 ± 0.012 [1.10 ± 0.3]	10	45	48	0.70	50
3.9	10 %	0.043 ± 0.012 [1.10 ± 0.3]	10	45	44	0.80	50
4.7	10 %	0.043 ± 0.012 [1.10 ± 0.3]	10	45	41	0.90	50
5.6	10 %	0.043 ± 0.012 [1.10 ± 0.3]	4	45	37	0.70	25
6.8	10 %	0.043 ± 0.012 [1.10 ± 0.3]	4	45	34	0.80	25
8.2	10 %	0.043 ± 0.012 [1.10 ± 0.3]	4	45	30	0.90	25
10	10 %	0.043 ± 0.012 [1.10 ± 0.3]	2 2	45	28	1.00	25
12	10 %	0.043 ± 0.012 [1.10 ± 0.3]	2	45	26	1.05	15
15	10 %	0.043 ± 0.012 [1.10 ± 0.3]	1	45	22	0.70	5
18	10 %	0.043 ± 0.012 [1.10 ± 0.3]	1	45	21	0.70	5 5
22	10 %	0.043 ± 0.012 [1.10 ± 0.3]	1	35	19	0.90	5
27	10 %	$0.043 \pm 0.012$ [1.10 ± 0.3]	1	35	17	0.90	5 5
33	10 %	$0.043 \pm 0.012 [1.10 \pm 0.3]$	1	35	15	1.05	5

DESCRIPTION **ILSB-1206** 3.3 µH ± 10 % ER e3 INDUCTANCE VALUE INDUCTANCE TOLERANCE PACKAGE CODE JEDEC<sup>®</sup> LEAD (Pb)-FREE STANDARD MODEL **GLOBAL PART NUMBER** L s в 1 2 0 6 Е R 3 R 3 Κ L TOI PRODUCT FAMILY INDUCTANCE SIZE PACKAGE CODE VALUE

Revision: 10-Jun-15

1 For technical questions, contact: <u>magnetics@vishav.com</u> Document Number: 34029

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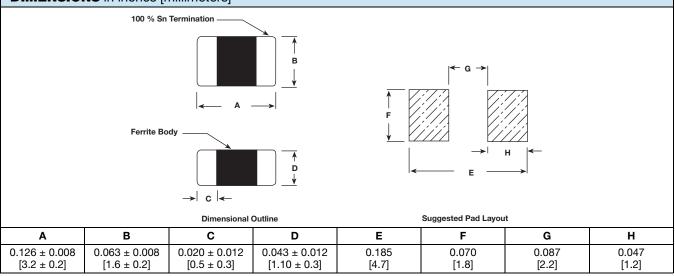
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**ILSB-1206** 

Vishay Dale

# **DIMENSIONS** in inches [millimeters]



TAPE AND REEL SPECIFICATIONS 1206 SIE PER EIA-481-1 in inches [millimeters]							
τ→  ←	A <sub>0</sub>	0.073 ± 0.004 [1.85 ± 0.1]					
$\longrightarrow  P_2  \leftarrow E_1$	B <sub>0</sub>	0.135 ± 0.004 [3.43 ± 0.1]					
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	D <sub>0</sub>	0.059 + 0.005/- 0.000 [1.5 + 0.127]					
	D <sub>1</sub>	0.039 min. [1.0 min.]					
$\uparrow \qquad \qquad$	E <sub>1</sub>	0.069 ± 0.004 [1.75 ± 0.1]					
$ \longrightarrow   \leftarrow A_0 $	F	0.138 ± 0.002 [3.50 ± 0.05]					
T1> <	K <sub>0</sub>	0.048 ± 0.002 [1.22 ± 0.05]					
ØC ØN	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.]					
	Т	0.008 ± 0.002 [0.2 ± 0.05]					
	А	7.000 ± 0.079 [178 ± 2.0]					
Empty Trailer    Components    Empty Tape Cover Tape Leader	N	2.500 [63.5]					
	С	0.512 ± 0.020 [13.00 ± 0.50]					
	W <sub>1</sub>	0.315 + 0.059/- 0.000 [8.00 + 1.5]					
> 160 mm Minimum	T <sub>1</sub>	0.079 ± 0.002 [2.00 ± 0.05]					

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