



Vishay Dale

RoHS

COMPLIANT

HALOGEN

FREE

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: 0.6 kg for 30 s

Beam Strength: 1.0 kg

STANDARD ELECTRICAL SPECIFICATIONS

FEATURES

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

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

-		RICAL SPECIFICATION	TEST FREQ.	1		DOD	DATED	
INDUCTANCE		THICKNESS "D"	(MHz)	Q	SRF MIN.	DCR MAX.	RATED DC CURRENT	
(µH)	TOL.	(INCHES [mm])		MÍN.	(MHz)	(Ω)	(mA)	
0.047	20 %	$0.035 \pm 0.008 [0.90 \pm 0.2]$	50	15	320	0.20	300	
0.056	20 %	$0.035 \pm 0.008 [0.90 \pm 0.2]$	50	15	300	0.20	300	
0.068	20 %	$0.035 \pm 0.008 [0.90 \pm 0.2]$	50	15	280	0.20	300	
0.082	20 %	$0.035 \pm 0.008 [0.90 \pm 0.2]$	50	15	255	0.20	300	
0.10	10 %	$0.035 \pm 0.008 [0.90 \pm 0.2]$	25	20	279	0.30	250	
0.12	10 %	$0.035 \pm 0.008 [0.90 \pm 0.2]$	25	20	253	0.30	250	
0.15	10 %	$0.035 \pm 0.008 [0.90 \pm 0.2]$	25	20	230	0.40	250	
0.18	10 %	$0.035 \pm 0.008 [0.90 \pm 0.2]$	25	20	213	0.40	250	
0.22	10 %	$0.035 \pm 0.008 [0.90 \pm 0.2]$	25	20	196	0.50	250	
0.27	10 %	$0.035 \pm 0.008 [0.90 \pm 0.2]$	25	20	173	0.50	250	
0.33	10 %	$0.035 \pm 0.008 [0.90 \pm 0.2]$	25	20	167	0.55	250	
0.39	10 %	$0.035 \pm 0.008 [0.90 \pm 0.2]$	25	25	156	0.65	200	
0.47	10 %	$0.035 \pm 0.008 [0.90 \pm 0.2]$	25	25	144	0.65	200	
0.56	10 %	$0.035 \pm 0.008 [0.90 \pm 0.2]$	25	25	133	0.75	150	
0.68	10 %	$0.035 \pm 0.008 [0.90 \pm 0.2]$	25	25	121	0.80	150	
0.82	10 %	$0.035 \pm 0.008 [0.90 \pm 0.2]$	25	25	115	1.00	150	
1.0	10 %	$0.035 \pm 0.008 [0.90 \pm 0.2]$	10	45	87	0.40	50	
1.2	10 %	$0.035 \pm 0.008 [0.90 \pm 0.2]$	10	45	75	0.50	50	
1.5	10 %	$0.035 \pm 0.008 [0.90 \pm 0.2]$	10	45	69	0.50	50	
1.8	10 %	$0.035 \pm 0.008 [0.90 \pm 0.2]$	10	45	64	0.60	50	
2.2	10 %	$0.035 \pm 0.008 [0.90 \pm 0.2]$	10	45	58	0.65	30	
2.7	10 %	$0.049 \pm 0.008 [1.25 \pm 0.2]$	10	45	52	0.75	30	
3.3	10 %	$0.049 \pm 0.008 [1.25 \pm 0.2]$	10	45	48	0.80	30	
3.9	10 %	$0.049 \pm 0.000 [1.25 \pm 0.2]$ $0.049 \pm 0.008 [1.25 \pm 0.2]$	10	45	40	0.90	30	
4.7	10 %	$0.049 \pm 0.008 [1.25 \pm 0.2]$	10	45	41	1.00	30	
5.6	10 %	$0.049 \pm 0.000 [1.25 \pm 0.2]$ $0.049 \pm 0.008 [1.25 \pm 0.2]$	4	45	37	0.90	15	
6.8	10 %	$0.049 \pm 0.000 [1.25 \pm 0.2]$ $0.049 \pm 0.008 [1.25 \pm 0.2]$	4	45	34	1.00	15	
8.2	10 %	$0.049 \pm 0.008 [1.25 \pm 0.2]$	4	45	30	1.10	15	
10	10 %	$0.049 \pm 0.008 [1.25 \pm 0.2]$		50	28	1.15	15	
12	10 %	$0.049 \pm 0.000 [1.25 \pm 0.2]$ $0.049 \pm 0.008 [1.25 \pm 0.2]$	2 2	50	26	1.25	15	
15	10 %	$0.049 \pm 0.000 [1.25 \pm 0.2]$ $0.049 \pm 0.008 [1.25 \pm 0.2]$	1	30	20	0.80	5	
18	10 %	$0.049 \pm 0.000 [1.25 \pm 0.2]$ $0.049 \pm 0.008 [1.25 \pm 0.2]$	1	30	21	0.90	5	
22	10 %	$0.049 \pm 0.008 [1.25 \pm 0.2]$	1	30	19	1.10	5	
27	10 %	$0.049 \pm 0.008 [1.25 \pm 0.2]$	1	30	17	1.15	5	
33	10 %	$0.049 \pm 0.008 [1.25 \pm 0.2]$	0.4	30	13	1.25	5	
DESCRIPT	ION	· · · ·	·	·	·	•		
ILSB-0805		3.3 μH ±	10 %	ER			e3	
MODEL		•	E TOLERANCE	PACKAGE			b)-FREE STANDARD	
GLOBAL PART NUMBER								
r r								
	LS	B 0 8	0 5	ER	3	R 3	K	
	DUCT FAMIL	_Y SIZE		PACKAGE CODE	INI	DUCTANCE VALUE	TOL.	

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1 For technical questions, contact: magnetics@vishay.com Document Number: 34028

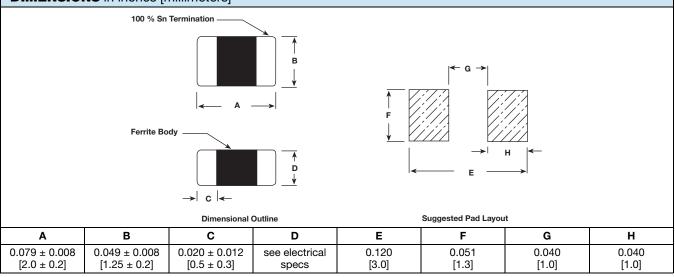
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ILSB-0805

Vishay Dale

DIMENSIONS in inches [millimeters]



TAPE AND REEL SPECIFICATIONS 0805 SIZE PER EIA-481-1 in inches [millimeters]							
τ→ ←	A ₀	$0.059 \pm 0.004 \ [1.50 \pm 0.1]$					
$\longrightarrow P_2 \leftarrow E_1$	B ₀	$0.092 \pm 0.004 \ [2.34 \pm 0.1]$					
$ P_0 \leftarrow $	D ₀	0.059 + 0.005/- 0.000 [1.5 + 0.127]					
	D ₁	0.039 min. [1.0 min.]					
$\uparrow \qquad \qquad$	E ₁	0.069 ± 0.004 [1.75 ± 0.1]					
$ \longrightarrow \leftarrow A_0 $	F	0.138 ± 0.002 [3.50 ± 0.05]					
T1	K ₀	0.049 ± 0.002 [1.24 ± 0.05]					
ØC ØN	P ₀	0.157 ± 0.004 [4.00 ± 0.1]					
	P ₁	0.157 ± 0.004 [4.00 ± 0.1]					
	P ₂	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	Ν	2.500 [63.5]					
	С	0.512 ± 0.020 [13.00 ± 0.50]					
	W ₁	0.315 + 0.059/- 0.000 [8.00 + 1.5]					
> 160 mm Minimum	T ₁	0.079 ± 0.002 [2.00 ± 0.05]					

2 For technical questions, contact: <u>magnetics@vishay.com</u>



Vishay

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