



Vishay Dale

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

STANDARD FLECTRICAL SPECIFICATIONS

Termination: 100 % Sn

Terminal Strength: 0.5 kg for 30 s Beam Strength: 0.3 kg

FEATURES

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

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	MIN.	(MHz)	(Ω)	(mA)
0.047	20 %	0.031 ± 0.008 [0.80 ± 0.2]	50	10	260	0.15	50
0.068	20 %	0.031 ± 0.008 [0.80 ± 0.2]	50	10	250	0.25	50
0.082	20 %	0.031 ± 0.008 [0.80 ± 0.2]	50	10	245	0.25	50
0.10	10 %	0.031 ± 0.008 [0.80 ± 0.2]	25	15	276	0.50	50
0.12	10 %	0.031 ± 0.008 [0.80 ± 0.2]	25	15	236	0.50	50
0.15	10 %	0.031 ± 0.008 [0.80 ± 0.2]	25	15	207	0.60	50
0.18	10 %	0.031 ± 0.008 [0.80 ± 0.2]	25	15	190	0.60	50
0.22	10 %	0.031 ± 0.008 [0.80 ± 0.2]	25	15	173	0.80	50
0.27	10 %	0.031 ± 0.008 [0.80 ± 0.2]	25	15	157	0.80	50
0.33	10 %	0.031 ± 0.008 [0.80 ± 0.2]	25	15	144	0.85	35
0.39	10 %	0.031 ± 0.008 [0.80 ± 0.2]	25	15	127	1.00	35
0.47	10 %	0.031 ± 0.008 [0.80 ± 0.2]	25	15	121	1.35	35
0.56	10 %	0.031 ± 0.008 [0.80 ± 0.2]	25	15	110	1.55	35
0.68	10 %	0.031 ± 0.008 [0.80 ± 0.2]	25	15	104	1.70	35
0.82	10 %	0.031 ± 0.008 [0.80 ± 0.2]	25	15	98	2.10	35
1.0	10 %	0.031 ± 0.008 [0.80 ± 0.2]	10	35	87	0.60	25
1.2	10 %	0.031 ± 0.008 [0.80 ± 0.2]	10	35	74	0.80	25
1.5	10 %	0.031 ± 0.008 [0.80 ± 0.2]	10	35	69	0.80	25
1.8	10 %	0.031 ± 0.008 [0.80 ± 0.2]	10	35	64	0.95	25
2.2	10 %	0.031 ± 0.008 [0.80 ± 0.2]	10	35	58	1.15	15
2.7	10 %	0.031 ± 0.008 [0.80 ± 0.2]	10	35	52	1.35	15
3.3	10 %	0.031 ± 0.008 [0.80 ± 0.2]	10	35	46	1.55	15
3.9	10 %	0.031 ± 0.008 [0.80 ± 0.2]	10	35	41	1.70	15
4.7	10 %	0.031 ± 0.008 [0.80 ± 0.2]	10	35	38	2.10	15
5.6	10 %	0.031 ± 0.008 [0.80 ± 0.2]	4	30	22	1.55	15
6.8	10 %	0.031 ± 0.008 [0.80 ± 0.2]	4	30	20	1.70	15
8.2	10 %	0.031 ± 0.008 [0.80 ± 0.2]	4	30	18	2.10	15
10	10 %	$0.031 \pm 0.008 [0.80 \pm 0.2]$	2	30	17	2.55	15

DESCRIPTION					
ILSB-0603	3.3 µH	± 10 %	ER	e3	
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC [®] LEAD (Pb)-FREE STANDARD	
GLOBAL PAR	F NUMBER				
PRODUC	S B 0	6 0 3 SIZE	E R PACKAGE CODE	3 R 3 K INDUCTANCE TOL. VALUE	
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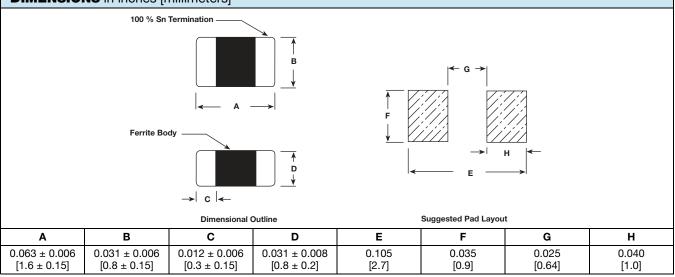
RoHS



ILSB-0603

Vishay Dale

DIMENSIONS in inches [millimeters]



TAPE AND REEL SPECIFICATIONS 0603 SIZE PER EIA-481-1 in inches [millimeters]							
4000 Piece/Reel T → ←	A ₀	0.045 ± 0.004 [1.14 ± 0.1]					
$\longrightarrow P_2 \leftarrow E_1$	B ₀	0.068 ± 0.004 [1.75 ± 0.1]					
$ P_0 \leftarrow 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ $	D ₀	0.059 + 0.005/- 0.000 [1.5 + 0.127]					
	D ₁	0.039 min. [1.0 min.]					
$ \begin{array}{c c} & & & & \\ \hline & & & & \\ \hline & & & & \\ \hline & & & &$	E ₁	0.069 ± 0.004 [1.75 ± 0.1]					
	F	0.138 ± 0.002 [3.50 ± 0.05]					
T1> ←	K ₀	0.045 ± 0.002 [1.15 ± 0.05]					
Ø CØ N]	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]					
	A	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]					
\oldsymbol{O} \oldsymbol{O} \oldsymbol{Direction} \oldsymbol{O} \oldsymbol{O} \oldsymbol{O} \oldsymbol{O} \oldsymbol{O} \oldsymbol{O} \oldsymbol{O}	W ₁	0.315 + 0.059/- 0.000 [8.00 + 1.5]					
	T ₁	0.079 ± 0.002 [2.00 ± 0.05]					

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