

RoHS

COMPLIANT



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Vishay Dale

# Inductors, Variable, Subminiature, Shielded, Radial Leaded



### **ELECTRICAL SPECIFICATIONS**

Adjustable inductance range: tunable range;  $\pm$  5 % for

0.10  $\mu H$  to 1  $\mu H.$   $\pm$  10 % for 1.2  $\mu H$  to 1000  $\mu H$  Dielectric strength: 840  $V_{RMS}$  at sea level

Working voltage: 300 V<sub>DC</sub>

Maximum current: based on temperature rise not to

exceed 15 °C at +90 °C ambient

**Incremental current:** The DC current required to cause a five percent reduction in the nominal inductance value

Operating temperature: -55 °C to +105 °C

#### **DENSITY SPECIFICATIONS**

Weight: 1.5 g maximum

Shielding: 3 % coupling maximum when two units are

tested side by side

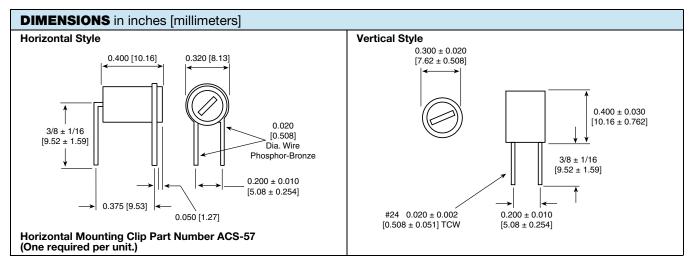
#### **FEATURES**

- · Classification is grade 3, class A
- · Subminiature shielded adjustable inductor
- · High Q values
- · Vertical or horizontal mounting
- Inductance range is 0.10 μH to 1000 μH
- 0.300" [7.62 mm] diameter by 0.400" [10.16 mm] length
- Printed board mounting facilitated by 0.200" [5.08 mm] grid spacing
- Unit has shield construction to allow maximum density packaging
- Accommodates close inductance adjustments in high density circuits that demand exceptional stability and high "Q" in the smallest size available
- Material categorization: for definitions of compliance please see <a href="https://www.vishay.com/doc?99912"><u>www.vishay.com/doc?99912</u></a>

#### **MECHANICAL SPECIFICATIONS**

**Tuning tool:** use number WVL-T or equal **Torque:** 0.40 inch-ounces to 6 inch-ounces

Terminal pull: 3 pounds



STANDARD ELECTRICAL SPECIFICATIONS								
MODEL	IND. (µH)	TOL. (%)	Q TYP.	TEST FREQUENCY (MHz)	SRF NOM. (MHz)	DCR MAX. (Ω)	RATED DC CURRENT (mA)	INCREMENTAL CURRENT (mA)
WVL	0.10	± 5	56	25	200	0.030	1510	-
WVL	0.12	± 5	56	25	200	0.030	1450	-
WVL	0.15	± 5	56	25	200	0.030	1400	-
WVL	0.18	± 5	56	25	200	0.035	1370	-
WVL	0.22	± 5	56	25	200	0.038	1340	-
WVL	0.27	± 5	64	25	200	0.040	1300	-
WVL	0.33	± 5	64	25	200	0.040	1260	-
WVL	0.39	± 5	64	25	200	0.045	1240	-
WVL	0.47	± 5	64	25	184	0.045	1200	-
WVL	0.56	± 5	64	25	176	0.050	1160	-
WVL	0.68	± 5	64	25	150	0.055	1100	-
WVL	0.82	± 5	68	25	144	0.060	1040	-

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**MARKING** 

WVL-H

 $0.10 \mu H$ 

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STAND	STANDARD ELECTRICAL SPECIFICATIONS								
MODEL	IND. (µH)	TOL. (%)	Q TYP.	TEST FREQUENCY (MHz)	SRF NOM. (MHz)	DCR MAX. (Ω)	RATED DC CURRENT (mA)	INCREMENTAL CURRENT (mA)	
WVL	1.0	± 5	68	25	128	0.070	986	-	
WVL	1.2	± 10	72	7.9	136	0.085	968	-	
WVL	1.5	± 10	80	7.9	124	0.100	893	-	
WVL	1.8	± 10	92	7.9	108	0.110	853	-	
WVL	2.2	± 10	88	7.9	96	0.120	817	-	
WVL	2.7	± 10	88	7.9	83	0.125	800	-	
WVL	3.3	± 10	77	7.9	74	0.165	696	-	
WVL	3.9	± 10	72	7.9	70	0.180	659	-	
WVL	4.7	± 10	76	7.9	63	0.245	571	-	
WVL	5.6	± 10	76	7.9	58	0.265	550	-	
WVL	6.8	± 10	68	7.9	50	0.330	493	-	
WVL	8.2	± 10	76	7.9	48	0.460	417	-	
WVL	10	± 10	72	7.9	43	0.640	359	-	
WVL	12	± 10	96	2.5	30	0.800	316	-	
WVL	15	± 10	96	2.5	23	0.865	301	-	
WVL	18	± 10	92	2.5	19	0.940	292	-	
WVL	22	± 10	100	2.5	17	1.03	267	-	
WVL	27	± 10	92	2.5	16	1.18	243	-	
WVL	33	± 10	96	2.5	15	1.30	231	-	
WVL	39	± 10	96	2.5	14	1.41	223	-	
WVL	47	± 10	88	2.5	12	1.61	203	-	
WVL	56	± 10	92	2.5	11	2.08	191	-	
WVL	68	± 10	84	2.5	10	2.20	185	-	
WVL	82	± 10	84	2.5	9	2.42	174	-	
WVL	100	± 10	76	2.5	8.4	2.15	333	333	
WVL	120	± 10	76	0.79	4.5	2.38	316	190	
WVL	150	± 10	72	0.79	4.0	2.52	306	175	
WVL	180	± 10	76	0.79	3.9	2.88	288	150	
WVL	220	± 10	76	0.79	3.7	3.18	273	125	
WVL	270	± 10	80	0.79	3.4	3.50	260	120	
WVL	330	± 10	80	0.79	2.8	4.80	222	110	
WVL	390	± 10	80	0.79	2.7	5.44	209	105	
WVL	470	± 10	80	0.79	2.6	5.90	201	100	
WVL	560	± 10	76	0.79	2.3	6.30	194	90	
WVL	680	± 10	80	0.79	2.2	7.20	181	80	
WVL	820	± 10	72	0.79	2.0	8	172	70	
WVL	1000	± 10	80	0.79	1.9	12	141	65	

#### - Manufacturer data printed **ORDERING INFORMATION - VERTICAL STYLE** WVL 0.10 µH EB 5 % **e2** JEDEC® LEAD (Pb)-FREE STANDARD **MODEL** INDUCTANCE VALUE INDUCTANCE TOLERANCE PACKAGE CODE **GLOBAL PART NUMBER - VERTICAL STYLE** W ٧ 9 Ε В R 1 0 J L INDUCTANCE TOLERANCE PACKAGE CODE INDUCTANCE VALUE MODEL **ORDERING INFORMATION - HORIZONTAL STYLE**

MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE		PACKAGE CODE	JEDEC® LEAD	AD (Pb)-FREE STANDARD				
GLOBAL PART NUMBER - HORIZONTAL STYLE										
W	V L 9	ЕВ	R	1 0	J	Н				
	MODEL	PACKAGE CODE	INDUCTANCE VALUE		INDUCTANCE TOLERANCE	SPECIAL				

EΒ

е2

5 %



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Vishay

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