

# RL-1506

## MINI-INDUCTORS CONFORMALLY COATED

### DESCRIPTION

- Conformally Coated Mini-Inductor

### ENVIRONMENTAL DATA

- Storage temperature range: -55°C to +130°C
- Operating temperature range: -40°C to +130°C

### PACKAGING INFORMATION

- Packaging information: pg. 507

### FEATURES & APPLICATIONS

- Have high Q and low distributed capacity
- Excellent for use where space, weight and size is a factor
- Suitable for automatic PCB insertion
- Standard industry color codes identify values

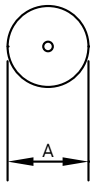
Verify operation with sample in actual circuit. Order samples at [www.rencousa.com](http://www.rencousa.com).

### MECHANICAL DIMENSIONS

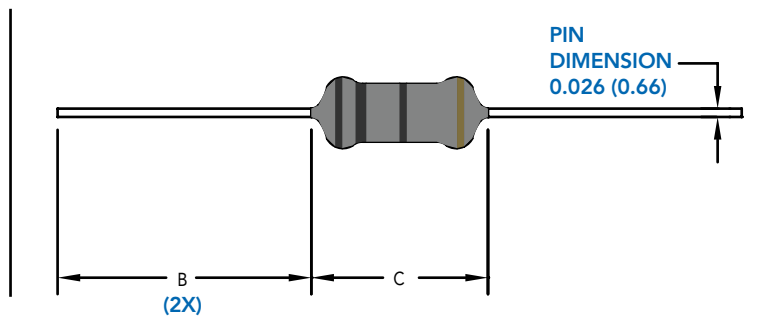
U.S. Standard (mm)

PART NUMBER	A (MAX.)	B (MIN.)	C (MAX.)	PART WEIGHT
RL-1506	0.16 (4.06)	0.79 (20.07)	0.41 (10.41)	0.40g (0.014oz)

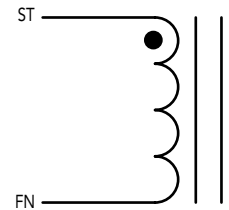
FRONT VIEW



SIDE VIEW



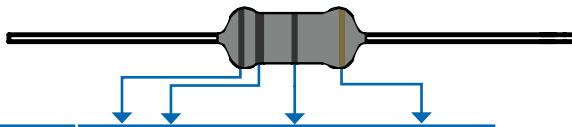
SCHEMATIC



# RL-1506

Renco Part No. RL-1506	Ind (μH)	DCR Max. (Ohms)	Q Min.	MRF (MHz)	SRF (MHz) Min.	Isat (mA)
RL-1506-.22	0.22	0.10	45.0	25.2	300.0	1400.0
RL-1506-.27	0.27	0.11	45.0	25.2	270.0	1320.0
RL-1506-.33	0.33	0.12	45.0	25.2	250.0	1280.0
RL-1506-.39	0.39	0.13	45.0	25.2	230.0	1200.0
RL-1506-.47	0.47	0.14	45.0	25.2	220.0	1150.0
RL-1506-.56	0.56	0.15	45.0	25.2	200.0	1100.0
RL-1506-.68	0.68	0.16	45.0	25.2	190.0	1030.0
RL-1506-.82	0.82	0.17	45.0	25.2	172.0	980.0
RL-1506-1.0	1.00	0.19	45.0	25.2	157.0	920.0
RL-1506-1.2	1.20	0.21	50.0	7.96	144.0	880.0
RL-1506-1.5	1.50	0.23	50.0	7.96	131.0	830.0
RL-1506-1.8	1.80	0.25	55.0	7.96	121.0	790.0
RL-1506-2.2	2.20	0.28	55.0	7.96	110.0	750.0
RL-1506-2.7	2.70	0.30	60.0	7.96	100.0	720.0
RL-1506-3.3	3.30	0.34	65.0	7.96	94.0	670.0
RL-1506-3.9	3.90	0.37	65.0	7.96	65.0	640.0
RL-1506-4.7	4.70	0.39	70.0	7.96	56.0	620.0
RL-1506-5.6	5.60	0.43	70.0	7.96	48.0	590.0
RL-1506-6.8	6.80	0.48	75.0	7.96	37.0	550.0
RL-1506-8.2	8.20	0.52	80.0	7.96	25.0	530.0

Renco Part No. RL-1506	Ind (μH)	DCR Max. (Ohms)	Q Min.	MRF (MHz)	SRF (MHz) Min.	Isat (mA)
RL-1506-10	10.0	0.58	65.0	7.96	21.0	500.0
RL-1506-12	12.0	0.63	50.0	2.52	19.0	480.0
RL-1506-15	15.0	0.72	50.0	2.52	17.0	460.0
RL-1506-18	18.0	0.77	50.0	2.52	13.0	430.0
RL-1506-22	22.0	0.84	50.0	2.52	9.60	410.0
RL-1506-27	27.0	0.94	55.0	2.52	7.20	390.0
RL-1506-33	33.0	1.03	55.0	2.52	6.30	370.0
RL-1506-39	39.0	1.12	50.0	2.52	6.30	350.0
RL-1506-47	47.0	1.22	45.0	2.52	6.30	340.0
RL-1506-56	56.0	1.34	40.0	2.52	6.20	320.0
RL-1506-68	68.0	1.47	40.0	2.52	5.70	305.0
RL-1506-82	82.0	1.62	35.0	2.52	5.30	290.0
RL-1506-100	100.0	1.80	30.0	2.52	4.80	275.0
RL-1506-120	120.0	3.70	55.0	0.796	3.80	185.0
RL-1506-150	150.0	4.20	45.0	0.796	3.50	175.0
RL-1506-180	180.0	4.60	50.0	0.796	3.30	165.0
RL-1506-220	220.0	5.10	55.0	0.796	3.00	155.0
RL-1506-270	270.0	5.80	65.0	0.796	2.80	145.0
RL-1506-330	330.0	6.40	65.0	0.796	2.60	137.0
RL-1506-390	390.0	7.00	65.0	0.796	2.40	133.0
RL-1506-470	470.0	7.70	60.0	0.796	2.25	126.0
RL-1506-560	560.0	8.50	60.0	0.796	2.10	120.0
RL-1506-680	680.0	9.40	55.0	0.796	1.95	113.0
RL-1506-820	820.0	10.50	55.0	0.796	1.85	105.0
RL-1506-1000	1000.0	14.00	50.0	0.796	1.40	100.0



Color	Nominal Inductance (μH)			Tolerance
	First figure	Second figure	Decade Power Multiplier	
Black	0		1	±20%
Brown	1		10	
Red	2		100	
Orange	3		1000	
Yellow	4		--	
Green	5		--	
Blue	6		--	
Purple	7		--	
Grey	8		--	
White	9		--	
Gold	--		0.1	±5%
Silver	--		0.01	±10%

#### NOTES:

1. ELECTRICAL SPECIFICATIONS MEASURED AT 25°C
2. Isat - DC CURRENT THAT WILL CAUSE INDUCTANCE TO DROP BY 5%
3. INDUCTANCE TESTED AT 10 kHz, 0.1 Vrms
4. MRF = Q TEST MEASURING FREQUENCY

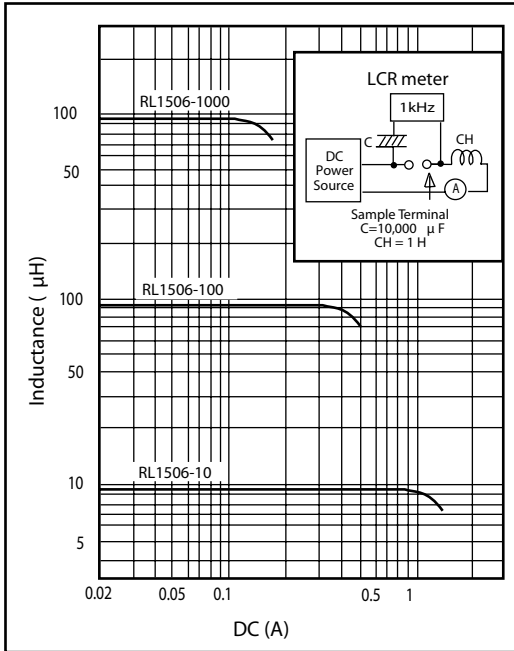


**RENCO ELECTRONICS INC.**

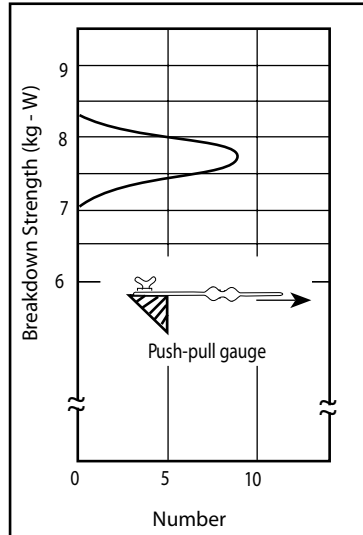
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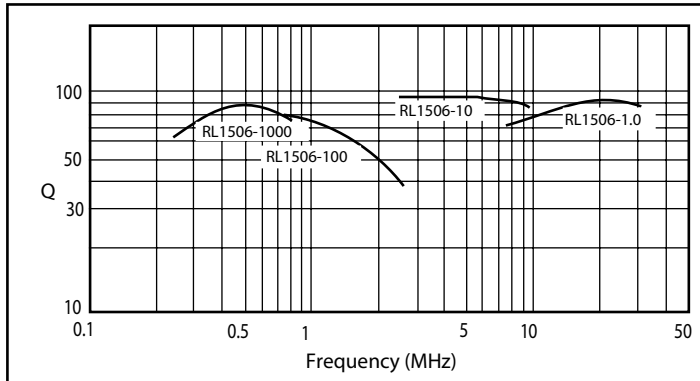
DC Characteristics



Tensile Strength



Q-Frequency Characteristics



Temperature Characteristics

