



RL-3316-S

SHIELDED SMD POWER INDUCTORS

DESCRIPTION

- Shielded SMD Power Inductor

ENVIRONMENTAL DATA

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

PACKAGING INFORMATION

- Packaging information: pg. 503

FEATURES & APPLICATIONS

- Extremely small flat top package
- Footprint of 0.370" X 0.510" and are low cost with high-energy storage
- Available in 11 values with inductance ratings from 1.0 μ H to 3300.0 μ H and currents up to 5 A

Verify operation with sample in actual circuit. Order samples at www.rencousa.com.

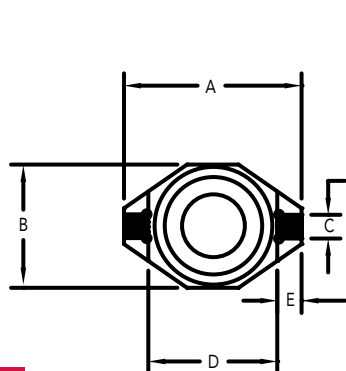
MECHANICAL DIMENSIONS

U.S. Standard (mm)

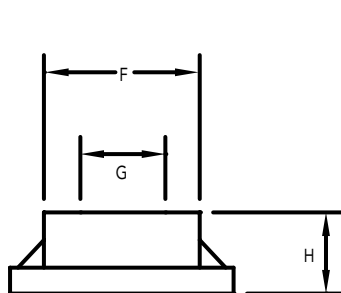
PART NUMBER	A (MAX.)	B (MAX.)	C	D	E	F
RL-3316-S	0.510 (12.95)	0.370 (9.40)	0.100 (2.54)	0.300 (7.62)	0.100 (2.54)	0.330 (8.38)

PART NUMBER	PART WEIGHT	G (MAX.)	H (MAX.)	I (REF.)	J (REF.)	K (REF.)
RL-3316-S	1.2g (0.042oz)	0.190 (4.83)	0.200 (5.80)	0.290 (7.37)	0.115 (2.92)	0.110 (2.79)

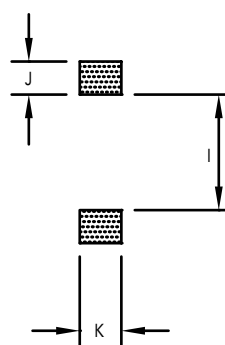
TOP VIEW



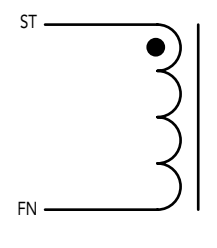
SIDE VIEW



RECOMMENDED LAND PATTERN



SCHEMATIC



RL-3316-S

Renco Part No. RL-3316-S	Inductance (μ H)	DCR Max. (mOhms)	Isat (A)	Irms (A)	SRF Typ. (MHz)
RL-3316-S-1.0	1.0 $\pm$ 20%	21.0	5.60	5.00	130.0
RL-3316-S-1.5	1.5 $\pm$ 20%	22.0	5.20	4.50	110.0
RL-3316-S-2.2	2.2 $\pm$ 20%	27.0	5.00	3.10	90.0
RL-3316-S-3.3	3.3 $\pm$ 20%	30.0	3.90	2.90	65.0
RL-3316-S-4.7	4.7 $\pm$ 20%	40.0	3.20	2.50	50.0
RL-3316-S-6.8	6.8 $\pm$ 20%	55.0	2.80	2.20	30.0
RL-3316-S-10	10.0 $\pm$ 20%	65.0	2.40	2.00	28.0
RL-3316-S-12	12.0 $\pm$ 20%	80.0	2.20	1.80	25.0
RL-3316-S-15	15.0 $\pm$ 20%	85.0	2.00	1.70	20.0
RL-3316-S-18	18.0 $\pm$ 15%	90.0	1.80	1.60	19.0
RL-3316-S-22	22.0 $\pm$ 15%	100.0	1.60	1.40	18.0
RL-3316-S-27	27.0 $\pm$ 15%	120.0	1.50	1.30	16.0
RL-3316-S-33	33.0 $\pm$ 15%	160.0	1.40	1.20	14.0
RL-3316-S-39	39.0 $\pm$ 15%	180.0	1.20	1.05	12.0
RL-3316-S-47	47.0 $\pm$ 15%	190.0	1.00	1.00	11.0
RL-3316-S-56	56.0 $\pm$ 15%	210.0	0.95	0.90	10.0
RL-3316-S-68	68.0 $\pm$ 15%	340.0	0.90	0.82	9.0
RL-3316-S-82	82.0 $\pm$ 15%	380.0	0.85	0.75	8.0
RL-3316-S-100	100.0 $\pm$ 10%	420.0	0.80	0.68	7.5
RL-3316-S-120	120.0 $\pm$ 10%	460.0	0.70	0.60	7.0
RL-3316-S-150	150.0 $\pm$ 10%	520.0	0.60	0.55	6.3
RL-3316-S-180	180.0 $\pm$ 10%	700.0	0.55	0.50	5.5
RL-3316-S-220	220.0 $\pm$ 10%	800.0	0.50	0.45	5.0
RL-3316-S-270	270.0 $\pm$ 10%	1100.0	0.45	0.40	4.5
RL-3316-S-330	330.0 $\pm$ 10%	1200.0	0.40	0.35	4.0
RL-3316-S-390	390.0 $\pm$ 10%	1400.0	0.39	0.33	3.8

NOTES:

1. ELECTRICAL SPECIFICATIONS MEASURED AT 25°C
2. Isat - DC CURRENT THAT WILL CAUSE INDUCTANCE TO DROP BY 5%
3. Irms - CURRENT THAT CAUSES THE TEMPERATURE TO RISE APPROX. 40°C ABOVE AMBIENT OF 25°C
4. INDUCTANCE DROP = 10% TYP.
5. INDUCTANCE TESTED AT 100 kHz, 0.1 Vrms



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