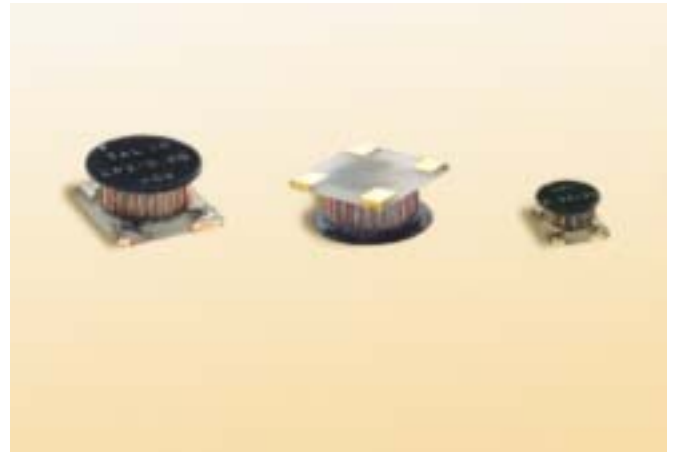


LP Series surface mount toroidal inductors are designed for use in applications where energy storage is required for maintenance of a highly stable inductance when a rapid change in load current occurs. These inductors are excellent for filtering high frequency signals while supporting a substantial DC current as well as for AC ripple, switch mode power supplies and for use with DC-DC Converters.

Features

- Operating frequency to 1 MHz
- High energy storage with minimum saturation
- High stability from no load to full load
- Pick and place compatible while providing consistent and reliable surface coplanarity
- Gold plated terminal pads ensure excellent solderability
- Designed as 1:1 Coupled Inductor (Series or Parallel) or as 1:1 Isolation Transformer
- Manufactured in ISO-9001 approved facility
- Test voltage between windings: 500 Vrms
- Operating temperature range: -40°C to +85°C
- Test frequency: Inductance measured at 0.10VAC @ 10kHz



Applications

DC-DC Converters • Common Mode Filter • Pulse Modulation
 Switching Regulators: Step-up, Step-down, Inverting or dual output
 Computer Note Books • Filtering Battery Powered Equipment
 Pulse Modulation

Electrical Specifications at 25°C ambient

Part Number	Parallel Connected			Series Connected			Energy Storage (μJ) *	Dimensions Inches(Millimeters)						
	Full Load Current (A _{DC})	L _O (μH) ±15% No Load	DCR mOhm	Full Load Current (A _{DC})	L _O (μH) ±15% No Load	DCR mOhm		A	B	C	D	E	F	H
LP2-4.40-2.2	4.40	2.2	7	2.20	8.8	28	0.354 (9.0)	0.354 (9.0)	0.098 (2.5)	0.098 (2.5)	0.157 (4.0)	0.157 (4.0)	0.232 (5.9)	
LP2-3.10-4.7	3.10	4.7	13	1.55	18.8	52								
LP2-2.08-10	2.08	10	28	1.04	40	112								
LP2-1.68-15	1.68	15	52	0.84	60	208								
LP2-1.40-22	1.40	22	70	0.70	88	280								
LP2-1.32-33	1.32	33	83	0.66	132	332								
LP2-1.08-47	1.08	47	139	0.54	188	556								
LP2-0.80-68	0.80	68	241	0.40	272	964								
LP2-0.66-100	0.66	100	295	0.33	400	1180								
LP2-0.54-150	0.54	150	521	0.27	600	2084								
LP2-0.44-220	0.44	220	784	0.22	880	3136								
LP2-0.36-330	0.36	330	960	0.18	1320	3840								
LP3-6.64-2.2	6.64	2.2	5	3.32	8.8	20	0.433 (11.0)	0.433 (11.0)	0.098 (2.5)	0.098 (2.5)	0.236 (6.0)	0.236 (6.0)	0.248 (6.3)	
LP3-4.46-4.7	4.46	4.7	12	2.23	18.8	48								
LP3-3.00-10	3.00	10	26	1.5	40	104								
LP3-2.42-15	2.42	15	37	1.21	60	148								
LP3-2.00-22	2.00	22	55	1.00	88	220								
LP3-1.62-33	1.62	33	84	0.81	132	336								
LP3-1.34-47	1.34	47	127	0.67	188	508								
LP3-1.12-68	1.12	68	188	0.56	272	752								
LP3-0.94-100	0.94	100	250	0.47	400	1000								
LP3-0.76-150	0.76	150	346	0.38	600	1384								
LP3-0.62-220	0.62	220	478	0.31	880	1912								
LP3-0.50-330	0.50	330	671	0.25	1320	2684								
LP3-0.42-470	0.42	470	1003	0.21	1880	4012								
LP3-0.36-680	0.36	680	1500	0.18	2720	6000								

Note: TALEMA style LP-1 has been discontinued and replaced with type LC-1, an encapsulated version. See the LC data sheet for electrical specifications and dimensions.

LP Series • Miniature High Current Toroidal Inductors

Electrical Specifications at 25°C

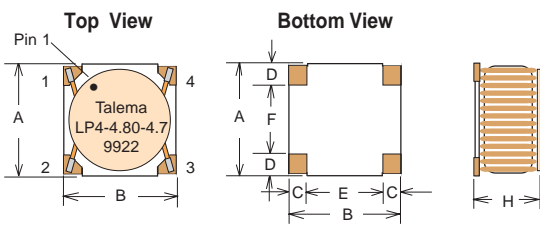
Part Number	Parallel Connected			Series Connected			Energy Storage (μJ) *	Dimensions Inches(Millimeters)						
	Full Load Current (A _{DC})	L _O (μH) ±15% No Load	DCR mOhm	Full Load Current (A _{DC})	L _O (μH) ±15% No Load	DCR mOhm		A	B	C	D	E	F	H
LP4-7.40-2.2	7.40	2.2	5	3.70	8.8	20	42.5	0.472 (12.0)	0.472 (12.0)	0.118 (3.0)	0.118 (3.0)	0.236 (6.0)	0.236 (6.0)	0.248 (6.3)
LP4-4.80-4.7	4.80	4.7	9	2.40	18.8	36	43.2							
LP4-3.36-10	3.36	10	21	1.68	40	84	43.2							
LP4-2.80-15	2.80	15	35	1.40	60	140	43.2							
LP4-2.30-22	2.30	22	50	1.15	88	200	43.6							
LP4-1.86-33	1.86	33	76	0.93	132	304	43.9							
LP4-1.56-47	1.56	47	112	0.78	188	448	43.1							
LP4-1.32-68	1.32	68	167	0.66	272	668	43.4							
LP4-1.06-100	1.08	100	250	0.54	400	1000	42.9							
LP4-0.88-150	0.88	150	307	0.44	600	1228	42.8							
LP4-0.72-220	0.72	220	470	0.36	880	1880	42.0							
LP4-0.60-330	0.60	330	657	0.30	1320	2628	44.0							
LP4-0.50-470	0.50	470	900	0.25	1880	3600	43.6							
LP4-0.40-680	0.40	680	1355	0.20	2720	5420	40.2							
LP4-0.34-1000	0.34	1000	2042	0.17	4000	8168	42.5							
LP5-6.40-4.7	6.40	4.7	7	3.20	18.8	28	73.9	0.472 (12.0)	0.472 (12.0)	0.118 (3.0)	0.118 (3.0)	0.236 (6.0)	0.236 (6.0)	0.327 (8.3)
LP5-4.50-10	4.50	10	16	2.25	40	64	71.6							
LP5-3.50-15	3.50	15	28	1.75	60	112	71.6							
LP5-3.00-22	3.00	22	38	1.50	88	152	71.6							
LP5-2.44-33	2.44	33	52	1.22	132	208	72.6							
LP5-2.04-47	2.04	47	72	1.02	188	288	72.1							
LP5-1.70-68	1.70	68	86	0.85	272	344	71.3							
LP5-1.40-100	1.40	100	128	0.70	400	512	71.6							
LP5-1.16-150	1.16	150	218	0.58	600	872	73.4							
LP5-0.94-220	0.94	220	298	0.47	880	1192	71.5							
LP5-0.78-330	0.78	330	451	0.39	1320	1804	73.8							
LP5-0.64-470	0.64	470	604	0.32	1880	2416	70.9							
LP5-0.54-680	0.54	680	934	0.27	2720	3736	73.2							
LP5-0.44-1000	0.44	1000	1629	0.22	4000	6516	71.4							
LP5-0.36-1500	0.36	1500	2483	0.18	6000	9932	71.6							
LP5-0.30-2200	0.30	2200	3773	0.15	8800	15092	72.9							

Talema's engineering staff can assist in the design of other inductance values and sizes.

Notes:

1. L(μH): Inductance is tested at 10mV and 10 kHz.
2. The μJoule rating (½LI²) is the ability of the inductor to store energy.

Dimensions



Pad Dimensions				
Type	A	B	C	D
LP2	10.0	9.0	3.0	3.0
LP3	12.0	11.0	3.0	3.0
LP4 & 5	13.0	12.0	3.5	3.5

Dimensions: Inches (Millimeters)
 Tolerance: ±0.010 (0.25) unless specified otherwise
 Surface Coplanarity will be <0.004(0.10)

Schematic

