

# LMax DIP Power Inductor



## LMDP Series –Shielded Style P

### FEATURES

- Density design, small size, and low cost
- Comparatively range rated current and high inductance
- Low DCR and high dip stability

### APPLICATIONS

- Personal Computers
- Variety of Battery Power Equipment
- DC Power Supply Circuits

### CHARACTERISTICS

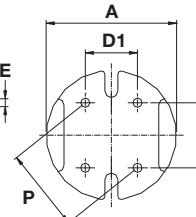
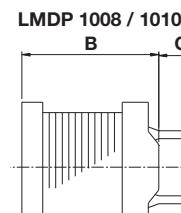
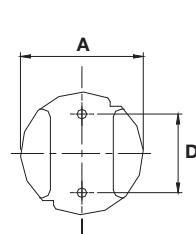
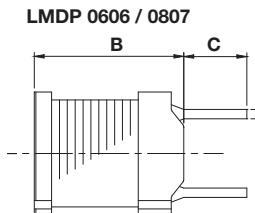
- Rated DC Current: The current when the inductance becomes 10% lower than its initial value. (Ta=25°C)
- Operating temperature range -40 ~ 100°C

### INDUCTANCE AND RATED CURRENT RANGES

- |                                     |              |               |
|-------------------------------------|--------------|---------------|
| • 0606                              | 22 ~ 1000µH  | 0.96 ~ 0.14A  |
| • 0807                              | 22 ~ 10000µH | 1.60 ~ 0.074A |
| • 1008                              | 10 ~ 1000µH  | 2.80 ~ 0.28A  |
| • 1010                              | 10 ~ 1000µH  | 3.51 ~ 0.35A  |
| • Electrical specifications at 25°C |              |               |



### DIMENSIONS



mm (inches)

Type	A	B max.	C	D	D1	E	P
0606	6.00 ± 0.50 (0.236 ± 0.020)	6.50 (0.256)	4.00 ± 1.00 (0.157 ± 0.039)	4.00 ± 0.30 (0.157 ± 0.012)	–	0.50 ± 0.10 (0.010 ± 0.004)	–
0807	7.80 ± 0.50 (0.307 ± 0.020)	7.50 (0.295)	5.00 ± 1.00 (0.197 ± 0.039)	5.00 ± 0.30 (0.197 ± 0.012)	–	0.65 ± 0.10 (0.026 ± 0.004)	–
1008	10.0 ± 0.50 (0.394 ± 0.020)	8.50 (0.335)	3.50 ± 1.00 (0.138 ± 0.039)	5.00 ± 0.30 (0.197 ± 0.012)	4.00 ± 0.30 (0.157 ± 0.012)	0.65 ± 0.10 (0.026 ± 0.004)	6.40 ± 0.50 (0.252 ± 0.020)
1010	10.0 ± 0.5 (0.394 ± 0.020)	10.5 (0.413)	3.5 ± 1.0 (0.138 ± 0.039)	5.0 ± 0.3 (0.197 ± 0.012)	4.0 ± 0.3 (0.157 ± 0.012)	0.70 ± 0.1 (0.028 ± 0.004)	6.40 ± 0.5 (0.252 ± 0.020)

### HOW TO ORDER

LM	DP	0606	M	101	P	T	A	B
<b>Family</b> LM = Power Inductor	<b>Series</b> DP = DIP	<b>Size</b> 0606 = 6x6xh 0807 = 8x7xh 1008 = 10x8xh 1010 = 10x10xh (h = see catalog)	<b>Tolerance</b> K = ±10% M = ±20%	<b>Inductance</b> 100 = 10µH 101 = 100µH 102 = 1000µH 103 = 10000µH	<b>Style</b>	<b>Termination</b> T = Sn Plate	<b>Special</b> A = Standard	<b>Packaging</b> B = Box

# LMax DIP Power Inductor



## LMDP Series –Shielded Style P

### ELECTRICAL CHARACTERISTICS

#### 0606/0807/1008/1010

Codes	L ( $\mu$ H)	Tolerance	Test Condition	DCR ( $\Omega$ ) max.				IDC (A) max.			
				0606	0807	1008	1010	0606	0807	1008	1010
100	10	M	100KHz, 0.1V	—	—	0.05	0.023	—	—	2.80	3.51
120	12	M	100KHz, 0.1V	—	—	0.06	0.024	—	—	2.50	3.24
150	15	M	100KHz, 0.1V	—	—	0.07	0.036	—	—	2.30	2.88
180	18	M	100KHz, 0.1V	—	—	0.08	0.039	—	—	2.10	2.61
220	22	M	100KHz, 0.1V	0.13	0.08	0.09	0.042	0.96	1.60	2.00	2.34
270	27	M	100KHz, 0.1V	0.18	0.10	0.10	0.045	0.87	1.40	1.76	2.16
330	33	M	100KHz, 0.1V	0.21	0.14	0.11	0.057	0.78	1.30	1.60	1.89
390	39	M	100KHz, 0.1V	0.26	0.15	0.12	0.076	0.72	1.20	1.38	1.80
470	47	M	100KHz, 0.1V	0.29	0.17	0.14	0.100	0.66	1.10	1.28	1.62
560	56	M	100KHz, 0.1V	0.33	0.19	0.15	0.110	0.60	0.99	1.20	1.44
680	68	M	100KHz, 0.1V	0.36	0.21	0.16	0.150	0.55	0.89	1.00	1.35
820	82	M	100KHz, 0.1V	0.39	0.27	0.18	0.160	0.50	0.81	0.96	1.26
101	100	K	1KHz, 0.1V	0.54	0.32	0.20	0.190	0.45	0.74	0.92	1.08
121	120	K	1KHz, 0.1V	0.62	0.36	0.24	0.210	0.41	0.67	0.80	0.99
151	150	K	1KHz, 0.1V	0.72	0.51	0.35	0.230	0.37	0.60	0.73	0.90
181	180	K	1KHz, 0.1V	0.88	0.57	0.40	0.260	0.34	0.55	0.64	0.82
221	220	K	1KHz, 0.1V	0.99	0.76	0.54	0.290	0.30	0.50	0.61	0.74
271	270	K	1KHz, 0.1V	1.52	0.86	0.76	0.360	0.27	0.45	0.56	0.67
331	330	K	1KHz, 0.1V	1.69	0.97	0.86	0.510	0.25	0.41	0.50	0.61
391	390	K	1KHz, 0.1V	1.85	1.28	0.93	0.690	0.23	0.37	0.44	0.55
471	470	K	1KHz, 0.1V	2.85	1.44	1.23	0.980	0.21	0.34	0.41	0.51
561	560	K	1KHz, 0.1V	3.21	1.61	1.34	1.100	0.19	0.31	0.38	0.46
681	680	K	1KHz, 0.1V	3.60	2.07	1.53	1.200	0.17	0.28	0.34	0.42
821	820	K	1KHz, 0.1V	4.87	2.33	2.10	1.300	0.16	0.26	0.32	0.38
102	1000	K	1KHz, 0.1V	5.56	2.72	2.30	1.500	0.14	0.23	0.28	0.35
122	1200	K	1KHz, 0.1V	—	3.98	—	—	—	0.21	—	—
152	1500	K	1KHz, 0.1V	—	4.50	—	—	—	0.19	—	—
182	1800	K	1KHz, 0.1V	—	6.81	—	—	—	0.17	—	—
222	2200	K	1KHz, 0.1V	—	7.56	—	—	—	0.16	—	—
272	2700	K	1KHz, 0.1V	—	8.54	—	—	—	0.14	—	—
332	3300	K	1KHz, 0.1V	—	9.74	—	—	—	0.13	—	—
392	3900	K	1KHz, 0.1V	—	12.90	—	—	—	0.12	—	—
472	4700	K	1KHz, 0.1V	—	14.70	—	—	—	0.11	—	—
562	5600	K	1KHz, 0.1V	—	20.40	—	—	—	0.099	—	—
682	6800	K	1KHz, 0.1V	—	23.00	—	—	—	0.089	—	—
822	8200	K	1KHz, 0.1V	—	30.60	—	—	—	0.081	—	—
103	10000	K	1KHz, 0.1V	—	35.00	—	—	—	0.074	—	—

