



## SURFACE-MOUNT POWER INDUCTORS

**ASPI -0401, -0403, -0504, -0602, -0703, -0705, -1004, -1005 SERIES**

### STANDARD SPECIFICATIONS

Part Number <sup>2</sup> # -XXX	L <sup>1,2</sup> (mH)	DCR W ( MAX )								I <sub>DC<sup>4</sup></sub> A ( MAX )							
		ASPI 0401	ASPI 0403	ASPI 0504	ASPI 0602	ASPI 0703	ASPI 0705	ASPI 1004	ASPI 1005	ASPI 0401	ASPI 0403	ASPI 0504	ASPI 0602	ASPI 0703	ASPI 0705	ASPI 1004	ASPI 1005
1R0	1.0	-	0.033	-	-	-	-	-	-	3.80	-	-	-	-	-	-	-
1R4	1.4	-	0.038	-	-	-	-	-	-	3.30	-	-	-	-	-	-	-
1R8	1.8	-	0.042	-	-	-	-	-	-	2.91	-	-	-	-	-	-	-
2R2	2.2	-	0.047	-	0.065	-	-	-	-	2.60	-	3.00	-	-	-	-	-
2R7	2.7	-	0.052	-	0.075	-	-	-	-	2.43	-	2.60	-	-	-	-	-
3R3	3.3	-	0.080	-	0.058	-	-	-	-	2.15	-	2.40	-	-	-	-	-
3R9	3.9	-	0.076	-	0.090	-	-	-	-	1.98	-	2.25	-	-	-	-	-
4R7	4.7	0.12	0.094	-	0.100	-	-	-	-	0.80	1.70	-	2.10	-	-	-	-
5R6	5.6	0.14	0.101	-	0.105	-	-	-	-	0.75	1.60	-	1.90	-	-	-	-
6R8	6.8	0.15	0.117	-	0.110	-	-	-	-	0.70	1.41	-	1.85	-	-	-	-
8R2	8.2	0.17	0.123	-	0.120	-	-	-	-	0.65	1.26	-	1.70	-	-	-	-
100	10	0.25	0.182	0.10	0.140	0.08	0.07	0.05	0.06	0.60	1.15	1.44	1.55	1.44	2.30	2.38	2.60
120	12	0.28	0.235	0.12	0.150	0.09	0.08	0.06	0.07	0.56	1.05	1.44	1.40	1.39	2.00	2.13	2.45
150	15	0.33	0.338	0.14	0.170	0.10	0.09	0.07	0.08	0.50	0.92	1.30	1.32	1.24	1.80	1.87	2.27
180	18	0.40	0.378	0.15	0.180	0.11	0.10	0.08	0.09	0.48	0.84	1.23	1.20	1.12	1.60	0.73	2.15
220	22	0.45	0.522	0.18	0.200	0.13	0.11	0.09	0.10	0.41	0.76	1.11	1.05	1.07	1.50	1.60	1.95
270	27	0.80	0.540	0.20	0.300	0.15	0.12	0.10	0.11	0.35	0.71	0.97	0.97	0.94	1.30	1.44	1.76
330	33	0.85	0.587	0.23	0.350	0.17	0.13	0.12	0.12	0.32	0.64	0.88	0.86	0.85	1.20	1.26	1.50
390	39	0.95	0.844	0.32	0.400	0.22	0.16	0.15	0.14	0.30	0.59	0.80	0.80	0.74	1.10	1.20	1.37
470	47	1.08	0.937	0.37	0.600	0.25	0.18	0.17	0.17	0.28	0.54	0.72	0.70	0.68	1.10	1.10	1.28
560	56	1.20	1.117	0.42	0.700	0.28	0.24	0.20	0.19	0.26	0.50	0.68	0.65	0.64	0.94	1.01	1.17
680	68	1.35	-	0.46	0.800	0.33	0.28	0.22	0.22	0.24	-	0.61	0.60	0.59	0.85	0.91	1.11
820	82	1.50	-	0.60	0.900	0.41	0.37	0.25	0.25	0.22	-	0.58	0.54	0.54	0.78	0.85	1.00
101	100	2.00	-	0.70	1.000	0.48	0.43	0.34	0.35	0.20	-	0.52	0.47	0.51	0.72	0.74	0.97
121	120	2.20	-	0.93	1.100	0.54	0.47	0.40	0.40	0.18	-	0.48	0.41	0.49	0.66	0.69	0.89
151	150	3.80	-	1.10	1.200	0.75	0.64	0.54	0.47	0.15	-	0.40	0.35	0.40	0.58	0.61	0.78
181	180	4.00	-	1.38	-	1.02	0.71	0.62	0.63	0.14	-	0.38	-	0.36	0.51	0.56	0.72
221	220	4.50	-	1.57	-	1.20	0.96	0.72	0.73	0.12	-	0.35	-	0.31	0.49	0.53	0.66
271	270	5.20	-	-	-	1.31	1.11	0.95	0.97	0.10	-	-	-	0.29	0.42	0.45	0.57
331	330	-	-	-	-	1.50	1.26	1.10	1.15	-	-	-	-	0.28	0.40	0.42	0.52
391	390	-	-	-	-	1.77	1.24	1.30	-	-	-	-	-	-	0.36	0.38	0.48
471	470	-	-	-	-	1.96	1.53	1.48	-	-	-	-	-	-	0.34	0.35	0.42
561	560	-	-	-	-	-	1.90	1.90	-	-	-	-	-	-	-	0.32	0.33
681	680	-	-	-	-	-	-	2.25	-	-	-	-	-	-	-	-	0.28
821	820	-	-	-	-	-	-	2.55	-	-	-	-	-	-	-	-	0.24

**NOTES:**

1. Inductance (L) measured @ 100 KHz, 100 mV with 0 DC bias
2. Inductance (L) tolerance: J = 5%, K = 10%, M = 20%
3. Operating temperature: -55°C to 85°C
4. Inductance drops by 10% at max rated current
5. Marking per EIA standard color code in nH
6. Dimensions: inches / mm; see spec sheet for tolerance limits
7. Specifications subject to change without notice

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### PHYSICAL CHARACTERISTICS <sup>6</sup>

Part Number	A	B	C	D	Figure
ASPI-0401	0.185 (4.7±0.2)	0.185 (4.7±0.2)	0.11 (2.8 Max)	0.125 (3.2)	1
ASPI-0403	0.18 (4.5±0.015)	0.16 (4.0±0.3)	0.18 (3.2±0.3)	0.05 (1.2)	2
ASPI-0504	0.23 (5.8±0.3)	0.21 (5.2±0.3)	0.18 (4.5±0.4)	0.05 (1.2)	2
ASPI-0602	0.267 (6.8±0.2)	0.267 (6.8±0.2)	0.157(4.0 Max)	0.20 (5.0)	1
ASPI-0703	0.31 (7.8±0.3)	0.28 (7.0±0.3)	0.14 (3.5±0.5)	0.08 (2.1)	2
ASPI-0705	0.31 (7.8±0.3)	0.28 (7.0±0.3)	0.20 (5.0±0.5)	0.08 (2.1)	2
ASPI-1004	0.40 (10.0±0.3)	0.35 (9.0±0.3)	0.17 (4.25±0.5)	0.08 (2.1)	2
ASPI-1005	0.40 (10.0±0.3)	0.35 (9.0±0.4)	0.21 (5.4±0.4)	0.08 (2.1)	2

Figure 1

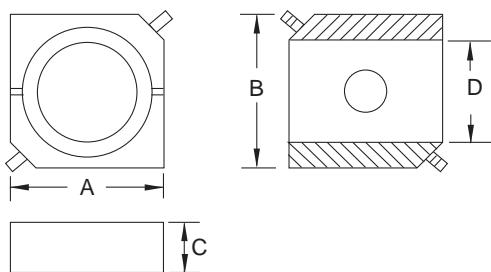
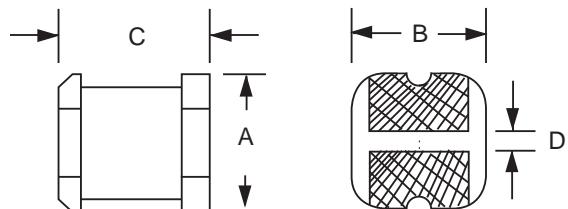


Figure 2



#### NOTES:

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