

LOW PROFILE SHIELDED SMD WIRE WOUND POWER INDUCTOR



ASPI-3D, 4D, 5D, 6D



FEATURES:

- Magnetic shielded for low radiation
- Low profile, compact size
- Large Terminal surface for good PCB bonding
- Low DCR, High Energy storage, suitable for large currents
- Ideal for a variety of DC-DC converter inductor applications

APPLICATIONS:

- Desktop, notebook, servers
- Network hubs, bridges, routers
- Portable communication equipment
- OA equipment
- LCD, DVD, modem, set-top box
- DC/DC converters

STANDARD SPECIFICATIONS:

Part Number	Inductance	Test Condition	DCR	IDC	Marking
Units	$\mu\text{H} \pm 30\%$		Ω (max.)	A (max.)	-
Symbol	L		DCR	IDC	-
ASPI-3D18-1R5N	1.5	100kHz,0.1V	0.056	1.55	1R5
ASPI-3D18-2R2N	2.2	100kHz,0.1V	0.072	1.20	2R2
ASPI-3D18-3R3N	3.3	100kHz,0.1V	0.085	1.10	3R3
ASPI-3D18-4R7N	4.7	100kHz,0.1V	0.105	0.90	4R7
ASPI-3D18-6R8N	6.8	100kHz,0.1V	0.170	0.73	6R8
ASPI-3D18-100N	10	100kHz,0.1V	0.210	0.55	100
ASPI-3D18-150N	15	100kHz,0.1V	0.295	0.45	150
ASPI-3D18-220N	22	100kHz,0.1V	0.430	0.40	220
ASPI-3D18-270N	27	100kHz,0.1V	0.557	0.38	270
ASPI-3D18-330N	33	100kHz,0.1V	0.675	0.32	330
ASPI-3D18-470N	47	100kHz,0.1V	0.900	0.21	470
ASPI-3D18-560N	56	100kHz,0.1V	1.330	0.22	560
ASPI-3D18-101N	100	100kHz,0.1V	2.600	0.16	101
ASPI-3D18-221N	220	100kHz,0.1V	4.770	0.13	221

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Units	$\mu\text{H} \pm 30\%$		Ω (max.)	A (max.)	-
Symbol	L		DCR	IDC	-
ASPI-4D18-1R0N	1.0	7.96MHz,0.1V	0.045	1.72	1R0
ASPI-4D18-2R2N	2.2	7.96MHz,0.1V	0.075	1.32	2R2
ASPI-4D18-2R7N	2.7	7.96MHz,0.1V	0.105	1.28	2R7
ASPI-4D18-3R3N	3.3	7.96MHz,0.1V	0.110	1.04	3R3
ASPI-4D18-3R9N	3.9	7.96MHz,0.1V	0.155	0.88	3R9
ASPI-4D18-4R7N	4.7	7.96MHz,0.1V	0.162	0.84	4R7
ASPI-4D18-5R6N	5.6	7.96MHz,0.1V	0.170	0.80	5R6
ASPI-4D18-6R8N	6.8	7.96MHz,0.1V	0.200	0.76	6R8
ASPI-4D18-8R2N	8.2	7.96MHz,0.1V	0.245	0.68	8R2
ASPI-4D18-100N	10	100kHz,0.1V	0.200	0.61	100
ASPI-4D18-120N	12	100kHz,0.1V	0.210	0.56	120
ASPI-4D18-150N	15	100kHz,0.1V	0.240	0.50	150
ASPI-4D18-180N	18	100kHz,0.1V	0.338	0.48	180
ASPI-4D18-220N	22	100kHz,0.1V	0.397	0.41	220
ASPI-4D18-270N	27	100kHz,0.1V	0.441	0.35	270
ASPI-4D18-330N	33	100kHz,0.1V	0.694	0.32	330
ASPI-4D18-390N	39	100kHz,0.1V	0.709	0.30	390
ASPI-4D18-470N	47	100kHz,0.1V	0.922	0.28	470
ASPI-4D18-560N	56	100kHz,0.1V	1.080	0.26	560
ASPI-4D18-680N	68	100kHz,0.1V	1.300	0.24	680
ASPI-4D18-820N	82	100kHz,0.1V	1.560	0.22	820
ASPI-4D18-101N	100	100kHz,0.1V	1.730	0.20	101
ASPI-4D18-121N	120	100kHz,0.1V	2.390	0.18	121
ASPI-4D18-151N	150	100kHz,0.1V	2.670	0.15	151
ASPI-4D18-181N	180	100kHz,0.1V	4.000	0.14	181

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Units	$\mu\text{H} \pm 30\%$		Ω (max.)	A (max.)	-
Symbol	L		DCR	IDC	-
ASPI-4D22-1R5N	1.5	100kHz,0.1V	0.018	2.00	1R5
ASPI-4D22-1R8N	1.8	100kHz,0.1V	0.021	1.90	1R8
ASPI-4D22-2R2N	2.2	100kHz,0.1V	0.025	1.80	2R2
ASPI-4D22-3R3N	3.3	100kHz,0.1V	0.035	1.40	3R3
ASPI-4D22-3R9N	3.9	100kHz,0.1V	0.040	1.30	3R9
ASPI-4D22-4R7N	4.7	100kHz,0.1V	0.056	1.10	4R7
ASPI-4D22-5R6N	5.6	100kHz,0.1V	0.062	1.05	5R6
ASPI-4D22-6R8N	6.8	100kHz,0.1V	0.088	1.00	6R8
ASPI-4D22-8R2N	8.2	100kHz,0.1V	0.097	0.90	8R2
ASPI-4D22-100N	10	100kHz,0.1V	0.102	0.80	100
ASPI-4D22-120N	12	100kHz,0.1V	0.110	0.75	120
ASPI-4D22-150N	15	100kHz,0.1V	0.127	0.68	150
ASPI-4D22-180N	18	100kHz,0.1V	0.169	0.60	180
ASPI-4D22-220N	22	100kHz,0.1V	0.200	0.54	220
ASPI-4D22-270N	27	100kHz,0.1V	0.283	0.51	270
ASPI-4D22-330N	33	100kHz,0.1V	0.326	0.48	330
ASPI-4D22-390N	39	100kHz,0.1V	0.451	0.43	390
ASPI-4D22-470N	47	100kHz,0.1V	0.500	0.38	470
ASPI-4D22-560N	56	100kHz,0.1V	0.555	0.36	560
ASPI-4D22-680N	68	100kHz,0.1V	0.634	0.33	680
ASPI-4D22-820N	82	100kHz,0.1V	0.794	0.30	820
ASPI-4D22-101N	100	100kHz,0.1V	0.880	0.25	101
ASPI-4D22-121N	120	100kHz,0.1V	1.140	0.23	121
ASPI-4D22-151N	150	100kHz,0.1V	1.350	0.21	151

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Units	$\mu\text{H} \pm 30\%$		Ω (max.)	A (max.)	-
Symbol	L		DCR	IDC	-
ASPI-4D28-1R2N	1.2	100kHz,0.1V	0.024	2.56	1R2
ASPI-4D28-1R8N	1.8	100kHz,0.1V	0.028	2.20	1R8
ASPI-4D28-2R2N	2.2	100kHz,0.1V	0.031	2.04	2R2
ASPI-4D28-2R7N	2.7	100kHz,0.1V	0.043	1.60	2R7
ASPI-4D28-3R3N	3.3	100kHz,0.1V	0.049	1.57	3R3
ASPI-4D28-3R9N	3.9	100kHz,0.1V	0.065	1.44	3R9
ASPI-4D28-4R7N	4.7	100kHz,0.1V	0.072	1.32	4R7
ASPI-4D28-5R6N	5.6	100kHz,0.1V	0.101	1.17	5R6
ASPI-4D28-6R8N	6.8	100kHz,0.1V	0.109	1.12	6R8
ASPI-4D28-8R2N	8.2	100kHz,0.1V	0.118	1.04	8R2
ASPI-4D28-100N	10	100kHz,0.1V	0.128	1.00	100
ASPI-4D28-120N	12	100kHz,0.1V	0.132	0.84	120
ASPI-4D28-150N	15	100kHz,0.1V	0.149	0.76	150
ASPI-4D28-180N	18	100kHz,0.1V	0.166	0.72	180
ASPI-4D28-220N	22	100kHz,0.1V	0.235	0.70	220
ASPI-4D28-270N	27	100kHz,0.1V	0.261	0.58	270
ASPI-4D28-330N	33	100kHz,0.1V	0.378	0.56	330
ASPI-4D28-390N	39	100kHz,0.1V	0.384	0.50	390
ASPI-4D28-470N	47	100kHz,0.1V	0.587	0.48	470
ASPI-4D28-560N	56	100kHz,0.1V	0.625	0.41	560
ASPI-4D28-680N	68	100kHz,0.1V	0.699	0.35	680
ASPI-4D28-820N	82	100kHz,0.1V	0.915	0.32	820
ASPI-4D28-101N	100	100kHz,0.1V	1.020	0.29	101
ASPI-4D28-121N	120	100kHz,0.1V	1.270	0.27	121
ASPI-4D28-151N	150	100kHz,0.1V	1.360	0.24	151
ASPI-4D28-181N	180	100kHz,0.1V	1.540	0.22	181

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Units	$\mu\text{H} \pm 30\%$		Ω (max.)	A (max.)	-
Symbol	L		DCR	IDC	-
ASPI-5D18-4R1N	4.1	10kHz,0.1V	0.057	1.95	4R1
ASPI-5D18-4R7N	4.7	10kHz,0.1V	0.072	1.77	4R7
ASPI-5D18-5R4N	5.4	10kHz,0.1V	0.076	1.60	5R4
ASPI-5D18-6R2N	6.2	10kHz,0.1V	0.096	1.40	6R2
ASPI-5D18-6R8N	6.8	10kHz,0.1V	0.110	1.30	6R8
ASPI-5D18-8R9N	8.9	10kHz,0.1V	0.116	1.25	8R9
ASPI-5D18-100N	10	10kHz,0.1V	0.124	1.20	100
ASPI-5D18-120N	12	10kHz,0.1V	0.153	1.10	120
ASPI-5D18-150N	15	10kHz,0.1V	0.196	0.97	150
ASPI-5D18-180N	18	10kHz,0.1V	0.210	0.85	180
ASPI-5D18-220N	22	10kHz,0.1V	0.290	0.80	220
ASPI-5D18-270N	27	10kHz,0.1V	0.330	0.75	270
ASPI-5D18-330N	33	10kHz,0.1V	0.386	0.65	330
ASPI-5D18-390N	39	10kHz,0.1V	0.520	0.57	390
ASPI-5D18-470N	47	10kHz,0.1V	0.595	0.54	470
ASPI-5D18-560N	56	10kHz,0.1V	0.665	0.50	560
ASPI-5D18-680N	68	10kHz,0.1V	0.840	0.43	680
ASPI-5D18-820N	82	10kHz,0.1V	0.978	0.41	820
ASPI-5D18-101N	100	10kHz,0.1V	1.200	0.36	101
ASPI-5D18-151N	150	10kHz,0.1V	2.000	0.25	151
ASPI-5D18-471N	470	10kHz,0.1V	6.560	0.18	471

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Units	$\mu\text{H} \pm 30\%$		Ω (max.)	A (max.)	-
Symbol	L		DCR	IDC	-
ASPI-5D28-2R2N	2.2	10kHz,0.1V	0.018	2.60	2R2
ASPI-5D28-2R6N	2.6	10kHz,0.1V	0.018	2.60	2R6
ASPI-5D28-3R0N	3.0	10kHz,0.1V	0.024	2.40	3R0
ASPI-5D28-4R2N	4.2	10kHz,0.1V	0.031	2.20	4R2
ASPI-5D28-4R7N	4.7	10kHz,0.1V	0.037	2.00	4R7
ASPI-5D28-5R3N	5.3	10kHz,0.1V	0.038	1.90	5R3
ASPI-5D28-5R6N	5.6	10kHz,0.1V	0.040	1.85	5R6
ASPI-5D28-6R2N	6.2	10kHz,0.1V	0.045	1.80	6R2
ASPI-5D28-6R8N	6.8	10kHz,0.1V	0.050	1.82	6R8
ASPI-5D28-8R2N	8.2	10kHz,0.1V	0.053	1.60	8R2
ASPI-5D28-100N	10	10kHz,0.1V	0.065	1.30	100
ASPI-5D28-120N	12	10kHz,0.1V	0.076	1.20	120
ASPI-5D28-150N	15	10kHz,0.1V	0.103	1.10	150
ASPI-5D28-180N	18	10kHz,0.1V	0.110	1.00	180
ASPI-5D28-220N	22	10kHz,0.1V	0.122	0.90	220
ASPI-5D28-270N	27	10kHz,0.1V	0.175	0.85	270
ASPI-5D28-330N	33	10kHz,0.1V	0.189	0.75	330
ASPI-5D28-390N	39	10kHz,0.1V	0.212	0.70	390
ASPI-5D28-470N	47	10kHz,0.1V	0.260	0.62	470
ASPI-5D28-560N	56	10kHz,0.1V	0.305	0.58	560
ASPI-5D28-680N	68	10kHz,0.1V	0.355	0.52	680
ASPI-5D28-820N	82	10kHz,0.1V	0.463	0.46	820
ASPI-5D28-101N	100	10kHz,0.1V	0.520	0.42	101

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Units	$\mu\text{H} \pm 30\%$		Ω (max.)	A (max.)	-
Symbol	L		DCR	IDC	-
ASPI-6D28-1R0N	1.0	10kHz,0.1V	0.012	6.15	1R0
ASPI-6D28-2R2N	2.2	10kHz,0.1V	0.018	4.80	2R2
ASPI-6D28-3R0N	3.0	10kHz,0.1V	0.024	3.00	3R0
ASPI-6D28-3R3N	3.3	10kHz,0.1V	0.026	2.80	3R3
ASPI-6D28-3R9N	3.9	10kHz,0.1V	0.027	2.60	3R9
ASPI-6D28-4R7N	4.7	10kHz,0.1V	0.029	2.50	4R7
ASPI-6D28-5R0N	5.0	10kHz,0.1V	0.031	2.40	5R0
ASPI-6D28-5R3N	5.3	10kHz,0.1V	0.033	2.30	5R3
ASPI-6D28-6R0N	6.0	10kHz,0.1V	0.035	2.25	6R0
ASPI-6D28-6R8N	6.8	10kHz,0.1V	0.052	2.20	6R8
ASPI-6D28-7R3N	7.3	10kHz,0.1V	0.054	2.10	7R3
ASPI-6D28-8R6N	8.6	10kHz,0.1V	0.058	1.85	8R6
ASPI-6D28-100N	10	10kHz,0.1V	0.065	1.70	100
ASPI-6D28-120N	12	10kHz,0.1V	0.070	1.55	120
ASPI-6D28-150N	15	10kHz,0.1V	0.084	1.40	150
ASPI-6D28-180N	18	10kHz,0.1V	0.095	1.32	180
ASPI-6D28-220N	22	10kHz,0.1V	0.128	1.20	220
ASPI-6D28-270N	27	10kHz,0.1V	0.142	1.05	270
ASPI-6D28-330N	33	10kHz,0.1V	0.165	0.97	330
ASPI-6D28-390N	39	10kHz,0.1V	0.210	0.86	390
ASPI-6D28-470N	47	10kHz,0.1V	0.238	0.80	470
ASPI-6D28-560N	56	10kHz,0.1V	0.277	0.73	560
ASPI-6D28-680N	68	10kHz,0.1V	0.304	0.65	680
ASPI-6D28-820N	82	10kHz,0.1V	0.390	0.60	820
ASPI-6D28-101N	100	10kHz,0.1V	0.535	0.54	101
ASPI-6D28-221N	220	10kHz,0.1V	1.350	0.45	221
ASPI-6D28-331N	330	10kHz,0.1V	2.000	0.35	331

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Symbol	L		DCR	IDC	-
ASPI-6D38-3R3N	3.3	10kHz,0.1V	0.020	3.50	3R3
ASPI-6D38-5R0N	5.0	10kHz,0.1V	0.024	2.90	5R0
ASPI-6D38-6R2N	6.2	10kHz,0.1V	0.027	2.50	6R2
ASPI-6D38-7R4N	7.4	10kHz,0.1V	0.031	2.30	7R4
ASPI-6D38-8R7N	8.7	10kHz,0.1V	0.034	2.20	8R7
ASPI-6D38-100N	10	10kHz,0.1V	0.038	2.00	100
ASPI-6D38-120N	12	10kHz,0.1V	0.053	1.70	120
ASPI-6D38-150N	15	10kHz,0.1V	0.057	1.60	150
ASPI-6D38-180N	18	10kHz,0.1V	0.092	1.50	180
ASPI-6D38-220N	22	10kHz,0.1V	0.096	1.30	220
ASPI-6D38-270N	27	10kHz,0.1V	0.109	1.20	270
ASPI-6D38-330N	33	10kHz,0.1V	0.124	1.10	330
ASPI-6D38-390N	39	10kHz,0.1V	0.138	1.00	390
ASPI-6D38-470N	47	10kHz,0.1V	0.155	0.95	470
ASPI-6D38-560N	56	10kHz,0.1V	0.202	0.85	560
ASPI-6D38-680N	68	10kHz,0.1V	0.234	0.75	680
ASPI-6D38-820N	82	10kHz,0.1V	0.324	0.70	820
ASPI-6D38-101N	100	10kHz,0.1V	0.368	0.65	101
ASPI-6D38-331N	330	10kHz,0.1V	1.250	0.39	331

OPTIONS AND PART IDENTIFICATION:

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ASPI- - -

Package Size Code
3D18: 3.8 x 3.8 x 1.8mm
4D18: 4.7 x 4.7 x 2.0mm
4D22: 4.7 x 4.7 x 2.4mm
4D28: 4.7 x 4.7 x 3.0mm
5D18: 5.7 x 5.7 x 2.0mm
5D28: 5.7 x 5.7 x 3.0mm
6D28: 6.7 x 6.7 x 3.0mm
6D38: 6.7 x 6.7 x 4.0mm

Inductance Code
Please refer to the table above

Packaging
Blank: Bulk
T: Tape and Reel

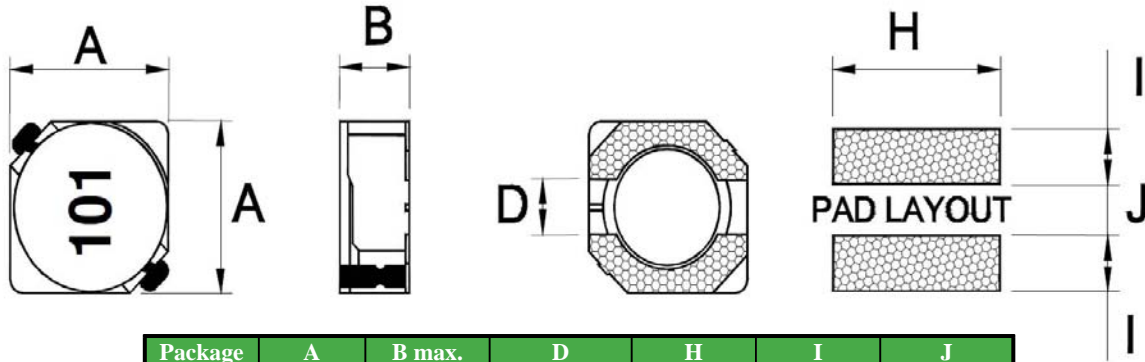
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OUTLINE DRAWING:

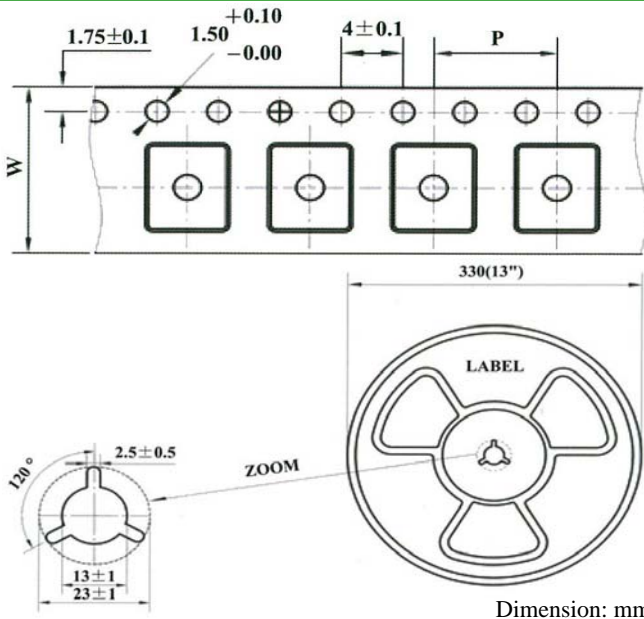


Package	A	B max.	D	H	I	J
3D18	3.8±0.3	1.8	1.15	4.1	1.60	1.2
4D18	4.7±0.3	2.0	1.5	5.3	1.75	1.5
4D22	4.7±0.3	2.4	1.5	5.3	1.90	1.5
4D28	4.7±0.3	3.0	1.5	5.3	1.90	1.5
5D18	5.7±0.3	2.0	2.0	6.3	2.15	2.0
5D28	5.7±0.3	3.0	2.0	6.3	2.15	2.0
6D28	6.7±0.3	3.0	2.0	7.3	2.65	2.0
6D38	6.7±0.3	4.0	2.0	7.3	2.65	2.0

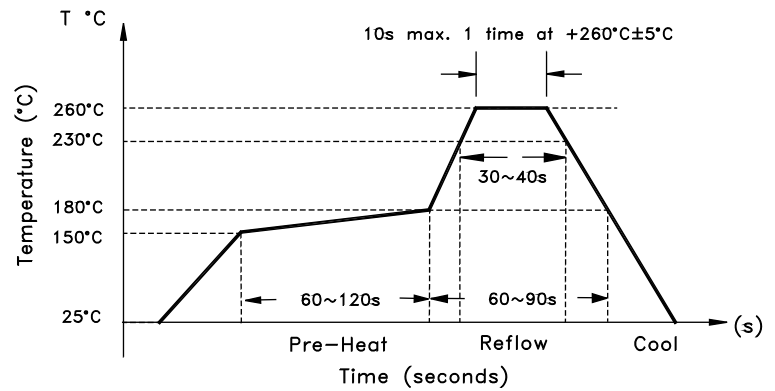
Unit: mm

TAPE & REEL:

REFLOW PROFILE:



Package	W	P	Reel Qty
3D18	12	8	2000pcs/reel
4D18	12	8	2000pcs/reel
4D22	12	8	2000pcs/reel
4D28	12	8	2000pcs/reel
5D18	12	8	2000pcs/reel
5D28	12	8	2000pcs/reel
6D28	16	12	1500pcs/reel
6D38	16	12	1000pcs/reel



ATTENTION: Abracon Corporation's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependant Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon Corporation is required. Please contact Abracon Corporation for more information.

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