SMD Power Inductor

ASPI-0705



7.8 x 7.0 x 5.0mm

Pb RoHS Compliant

FEATURES:

- Suitable for RoHS reflow profile
- High current rating and low DCR
- Special lead wire design to prevent open circuit failure
- Excellent terminal strength to mechanical stress

APPLICATIONS:

- OA equipments
- PC and notebook
- LCD TV set
- Power supply

ELECTRICAL SPECIFICATIONS:

Abracon P/N:	ASPI-0705 Series
Operating Temperature:	-40˚C to +125˚C
Storage Temperature:	+15˚C to +28˚C

PART NUMBER	Inductance (uH)	Tolerance	Testing Condition	DCR (Ω) max	IDC (A) max	Inductance Code
ASPI-0705-1R0	1.0	M	100KHz, 0.25V	0.013	3.40	1R0
ASPI-0705-1R5	1.5	M	100KHz, 0.25V	0.016	3.30	1R5
ASPI-0705-1R8	1.8	M	100KHz, 0.25V	0.020	3.20	1R8
ASPI-0705-2R2	2.2	M	100KHz, 0.25V	0.023	3.00	2R2
ASPI-0705-2R5	2.5	M	100KHz, 0.25V	0.026	2.90	2R5
ASPI-0705-2R7	2.7	M	100KHz, 0.25V	0.027	2.85	2R7
ASPI-0705-3R3	3.3	M	100KHz, 0.25V	0.028	2.80	3R3
ASPI-0705-4R7	4.7	M	100KHz, 0.25V	0.045	2.70	4R7
ASPI-0705-5R6	5.6	M	100KHz, 0.25V	0.048	2.65	5R6
ASPI-0705-6R8	6.8	M	100KHz, 0.25V	0.058	2.50	6R8
ASPI-0705-8R2	8.2	M	100KHz, 0.25V	0.070	2.40	8R2
ASPI-0705-100	10	K, M	1KHz, 0.25V	0.070	2.30	100
ASPI-0705-120	12	K, M	1KHz, 0.25V	0.080	2.00	120
ASPI-0705-150	15	K, M	1KHz, 0.25V	0.090	1.80	150
ASPI-0705-180	18	K, M	1KHz, 0.25V	0.100	1.60	180
ASPI-0705-220	22	K, M	1KHz, 0.25V	0.110	1.50	220
ASPI-0705-270	27	K, M	1KHz, 0.25V	0.120	1.30	270
ASPI-0705-330	33	K, M	1KHz, 0.25V	0.130	1.20	330
ASPI-0705-390	39	K, M	1KHz, 0.25V	0.160	1.10	390
ASPI-0705-470	47	K, M	1KHz, 0.25V	0.180	1.10	470
ASPI-0705-560	56	K, M	1KHz, 0.25V	0.240	0.94	560
ASPI-0705-680	68	K, M	1KHz, 0.25V	0.280	0.85	680
ASPI-0705-820	82	K, M	1KHz, 0.25V	0.370	0.78	820
ASPI-0705-101	100	K, M	1KHz, 0.25V	0.430	0.72	101
ASPI-0705-121	120	K, M	1KHz, 0.25V	0.470	0.66	121
ASPI-0705-151	150	K, M	1KHz, 0.25V	0.640	0.58	151
ASPI-0705-181	180	K, M	1KHz, 0.25V	0.710	0.51	181
ASPI-0705-221	220	K, M	1KHz, 0.25V	0.960	0.49	221
ASPI-0705-271	270	K, M	1KHz, 0.25V	1.110	0.42	271
ASPI-0705-331	330	K, M	1KHz, 0.25V	1.260	0.40	331
ASPI-0705-391	390	K, M	1KHz, 0.25V	1.770	0.36	391
ASPI-0705-471	470	K, M	1KHz, 0.25V	1.960	0.34	471
ASPI-0705-561	560	K, M	1KHz, 0.25V	2.280	0.32	561
ASPI-0705-681	680	K, M	1KHz, 0.25V	2.480	0.30	681
ASPI-0705-821	820	K, M	1KHz, 0.25V	3.400	0.30	821
ASPI-0705-102	1000	K, M	1KHz, 0.25V	4.500	0.30	102
ASPI-0705-122	1200	K, M	1KHz, 0.25V	5.000	0.17	122
ASPI-0705-152	1500	K, M	1KHz, 0.25V	5.520	0.16	152

Test Conditions

Inductance: 2.52MHz for 10µH ~ 82µH; 1kHz for 100µH ~ 470µH

IDC max: ΔL/L (initial) ≥ -10% or ΔT=40°C (Ta=25°C), whichever is lower.

ABRACON

5101 Hidden Creek Ln Spicewood TX 78669
Phone: 512-371-6159 | Fax: 512-351-8858
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REVISED: 03-04-21

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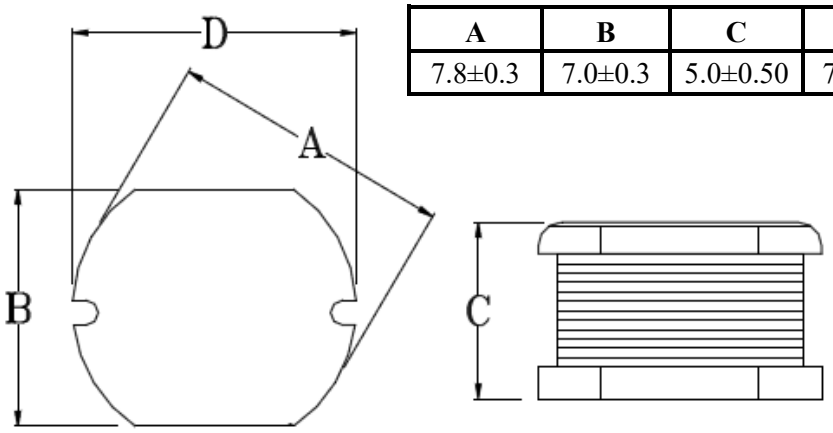
Pb RoHS Compliant

▷ PART NUMBER IDENTIFICATION:

ASPI-0705-□□-□

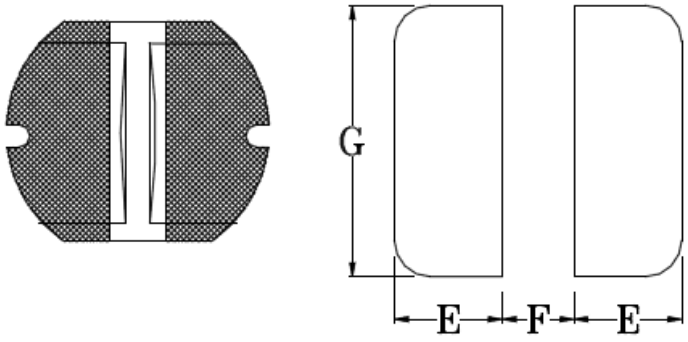
Inductance Code	Tolerance %	Packaging
Please refer to the table above	K: ± 10% M: ± 20%	T: Tape and Reel (1kpcs / reel)

▷ OUTLINE DRAWING:



A	B	C	D	E	F	G
7.8±0.3	7.0±0.3	5.0±0.50	7.8±0.3	3.00	2.00	7.50

Recommended Land Pattern



Dimension: mm

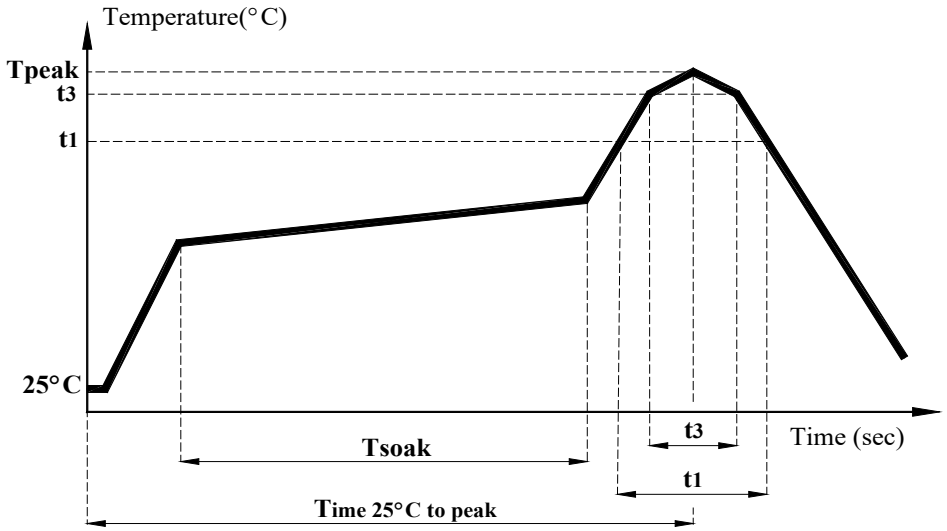
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REFLOW PROFILE:



Item	mark	
Temperature rise gradient		3℃/sec (max)
Heating time	Tsoak	50s ～ 150s
Heating temperature		120℃～180℃
Time over 217℃	t1	70 sec
Time within 5℃ of actual peak temperature	t3	10～30 sec
Peak temperature	Tpeak	250 (+0 / -5 ℃)
Time 25℃ to peak Temperature		6 minutes max.

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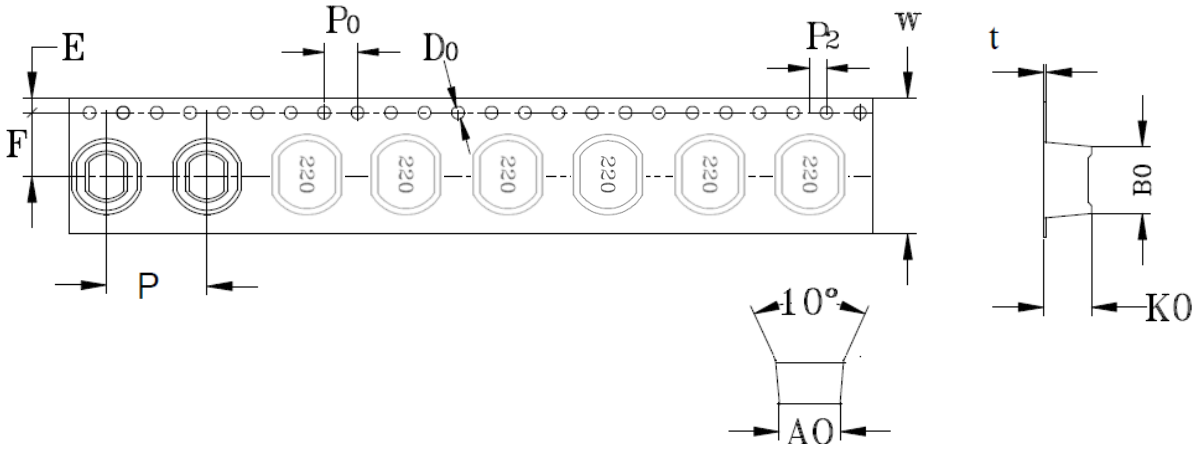


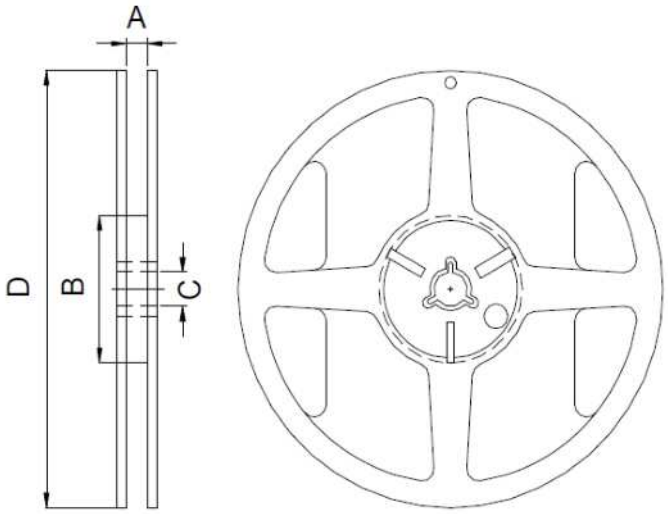
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TAPE & REEL:

T: 1,000pcs / reel





CARRIER TAPE / SIZE (mm)										REEL 13"×24mm			
A0	B0	K0	F	E	W	P	Po	P2	t	A	B	C	D
7.2 ± 0.1	8.1 ± 0.1	5.35 ± 0.1	7.5 ± 0.1	1.75 ± 0.1	16 ± 0.3	12 ± 0.1	4 ± 0.1	2 ± 0.1	0.4± 0.05	16.5 ± 0.2	100 ± 0.5	13.2 ± 0.3	330 ± 1.0

Dimension: mm

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