SMD Power Inductor

ASPI-0504

RoHS/RoHS II Compliant



5.8 x 5.2 x 4.5mm

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-0504 Series
Operating Temperature:	-40˚C to +85˚C
Storage Temperature:	+5˚C to +40˚C (In Tape and Reel)

PART NUMBER ASPI-0504- Inductance Code	Inductance (uH)	Test Frequency	Tolerance	DCR (Ω) max	IDC (A) max
ASPI-0504-4R7	4.7	7.96MHz	K, M	0.04	3.50
ASPI-0504-100	10	2.52MHz	K, M	0.10	1.44
ASPI-0504-120	12	2.52MHz	K, M	0.12	1.40
ASPI-0504-150	15	2.52MHz	K, M	0.14	1.30
ASPI-0504-180	18	2.52MHz	K, M	0.15	1.23
ASPI-0504-220	22	2.52MHz	K, M	0.18	1.11
ASPI-0504-270	27	2.52MHz	K, M	0.20	0.97
ASPI-0504-330	33	2.52MHz	K, M	0.23	0.88
ASPI-0504-390	39	2.52MHz	K, M	0.32	0.80
ASPI-0504-470	47	2.52MHz	K, M	0.37	0.72
ASPI-0504-560	56	2.52MHz	K	0.42	0.68
ASPI-0504-680	68	2.52MHz	K	0.46	0.61
ASPI-0504-820	82	2.52MHz	K	0.60	0.58
ASPI-0504-101	100	1KHz	K	0.70	0.52
ASPI-0504-121	120	1KHz	K	0.93	0.48
ASPI-0504-151	150	1KHz	K	1.10	0.40
ASPI-0504-181	180	1KHz	K	1.38	0.38
ASPI-0504-221	220	1KHz	K	1.57	0.35
ASPI-0504-102	1000	1KHz	M	14.4	0.15

Test Conditions
Inductance: 100kHz
Isat: ΔL/L (initial) ≥ -10% or ΔT=40°C (Ta=20°C), whichever is lower.

OPTIONS AND PART IDENTIFICATION

ASPI-0504- ☐ ☐ - ☐

Inductance Code	Tolerance %	Packaging
Please refer to the table above	K: ± 10% M: ± 20%	T: Tape and Reel (1.5kpcs / reel)

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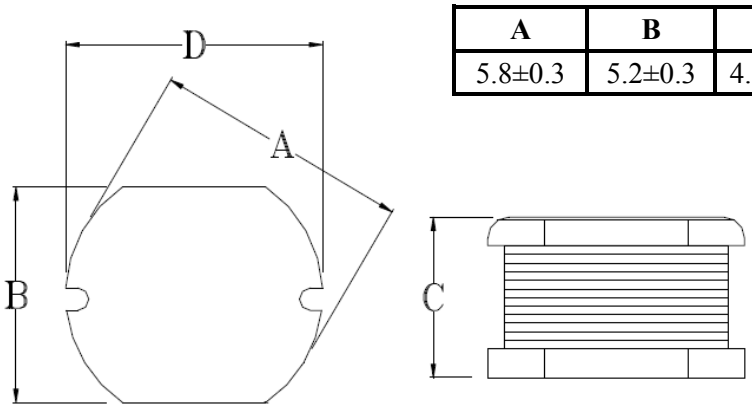
ASPI-0504



5.8 x 5.2 x 4.5mm

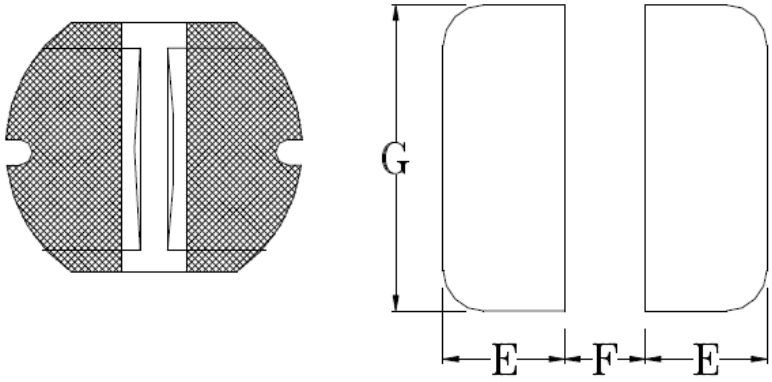
Pb RoHS Compliant

OUTLINE DRAWING:



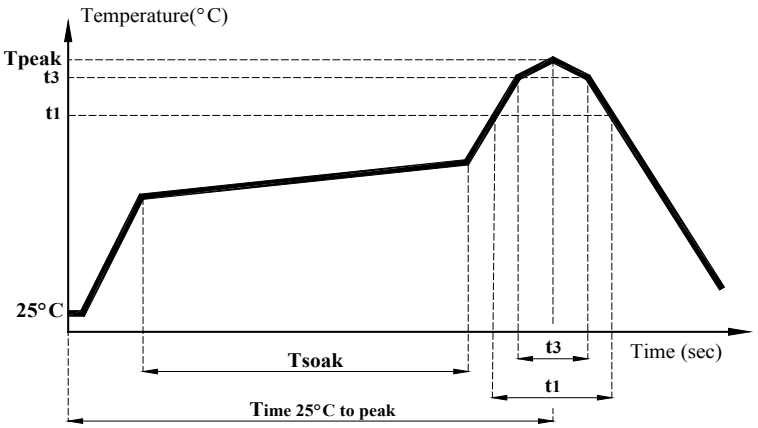
A	B	C	D	E	F	G
5.8±0.3	5.2±0.3	4.5±0.35	5.8±0.3	1.80	1.90	5.00

Recommended Land Pattern



Dimension: mm

REFLOW PROFILE:



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

30332 Esperanza, Rancho Santa Margarita, California 92688
tel 949-546-8000| fax 949-546-8001| www.abracon.com

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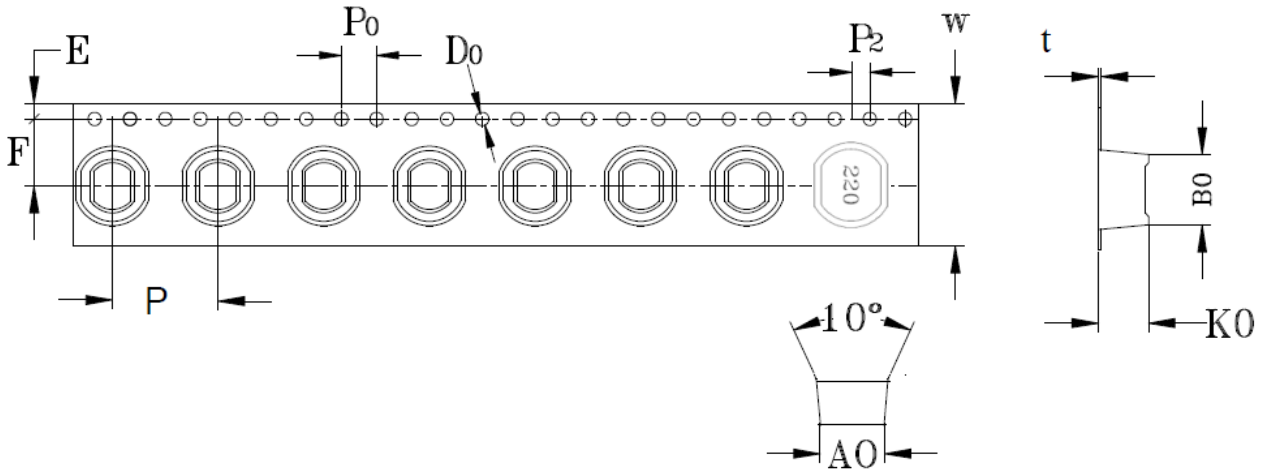


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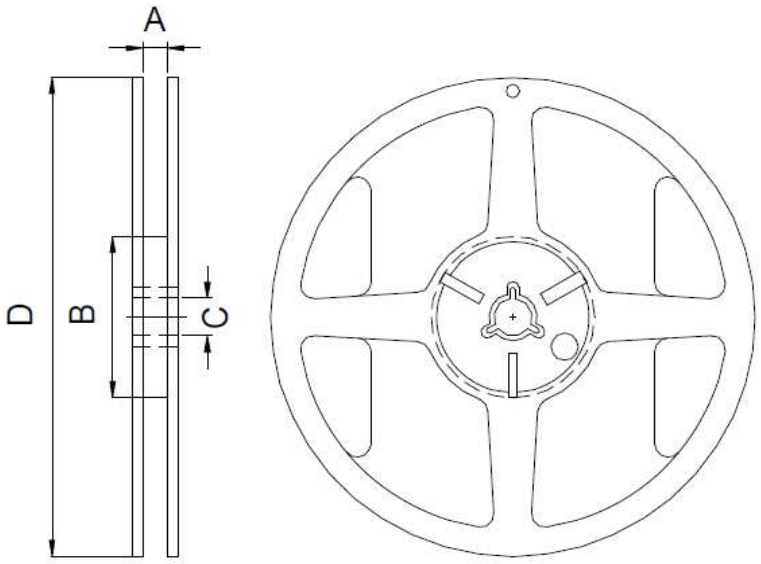
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TAPE & REEL:

T: 1,500pcs / reel



A0	B0	K0	F	E	W	P	Po	P2	t
5.4 ± 0.1	6.0 ± 0.1	4.8 ± 0.1	5.5 ± 0.1	1.75 ± 0.1	12 ± 0.3	8 ± 0.1	4 ± 0.1	2 ± 0.1	0.4± 0.05



A	B	C	D
12.5 ± 0.2	100 ± 0.5	13.2 ± 0.3	330 ± 1.0

Dimension: mm

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tel 949-546-8000 | fax 949-546-8001 | www.abracon.com