

# High Current Unshielded, SMD Power Inductors



5.8 x 5.2 x 3.2mm

ASPI-0503H



RoHS/RoHS II compliant

MSL level: 1

## FEATURES:

- Suitable for RoHS reflow profile
- High current rating and low DCR
- 3.2mm height profile
- 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:

Abrakon P/N:	ASPI-0503H Series
Operating Temperature:	-40°C to +125°C
Storage Temperature:	-10°C to +40°C

PART NUMBER	INDUCTANCE (µH)	Tolerance	DCR (Ω) max	IDC (A) max	Inductance Code
ASPI-0503H-2R2	2.2	M	0.03	3.50	2R2
ASPI-0503H-3R3	3.3	M	0.05	2.80	3R3
ASPI-0503H-4R7	4.7	M	0.07	2.50	4R7
ASPI-0503H-6R8	6.8	M	0.09	2.20	6R8
ASPI-0503H-100	10.0	M	0.12	1.80	100
ASPI-0503H-120	12.0	M	0.13	1.75	120
ASPI-0503H-150	15.0	M	0.15	1.70	150
ASPI-0503H-180	18.0	M	0.18	1.60	180
ASPI-0503H-220	22.0	M	0.22	1.50	220
ASPI-0503H-270	27.0	K	0.24	1.40	270
ASPI-0503H-330	33.0	K	0.30	1.10	330
ASPI-0503H-390	39.0	K	0.40	1.00	390
ASPI-0503H-470	47.0	K	0.43	0.90	470
ASPI-0503H-560	56.0	K	0.50	0.85	560
ASPI-0503H-680	68.0	K	0.60	0.80	680
ASPI-0503H-820	82.0	K	0.80	0.65	820
ASPI-0503H-101	100.0	K	0.90	0.60	101
ASPI-0503H-121	120.0	K	1.00	0.58	121
ASPI-0503H-151	150.0	K	1.30	0.43	151
ASPI-0503H-181	180.0	K	1.50	0.41	181
ASPI-0503H-221	220.0	K	2.00	0.38	221
ASPI-0503H-271	270.0	K	2.50	0.35	271
ASPI-0503H-331	330.0	K	3.20	0.28	331

## Test Conditions

**Inductance:** Test Frequency: 100KHz / 1V

**Isat:**  $\Delta L/L$  (initial)  $\geq -10\%$  or  $\Delta T=40^\circ\text{C}$  ( $T_a=20^\circ\text{C}$ ), whichever is lower.

**Test Equipment:** UC1068B

## OPTIONS AND PART IDENTIFICATION

ASPI-0503H---

**Inductance Code**  
Please refer to the table above

**Tolerance %**  
K:  $\pm 10\%$   
M:  $\pm 20\%$

**Packaging**  
T: Tape and Reel (2Kpcs / reel)

# High Current Unshielded, SMD Power Inductors



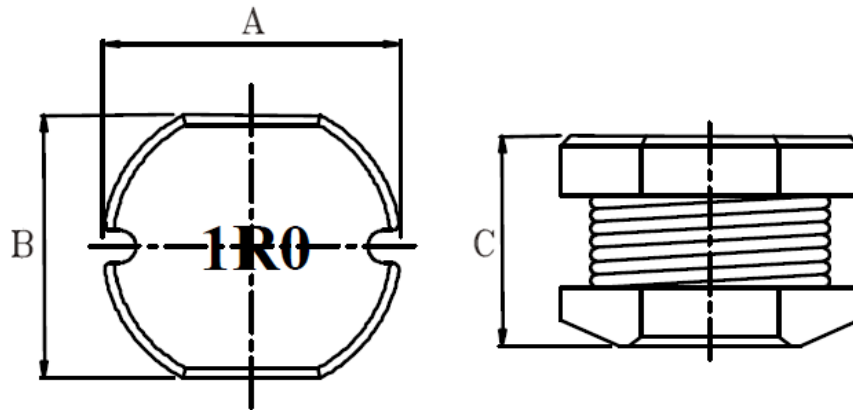
5.8 x 5.2 x 3.2mm

ASPI-0503H

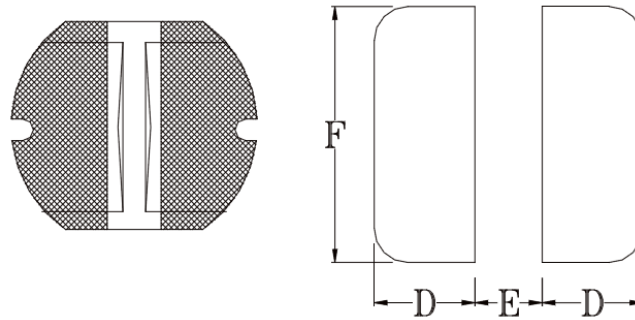


RoHS/RoHS II compliant

## OUTLINE DRAWING:



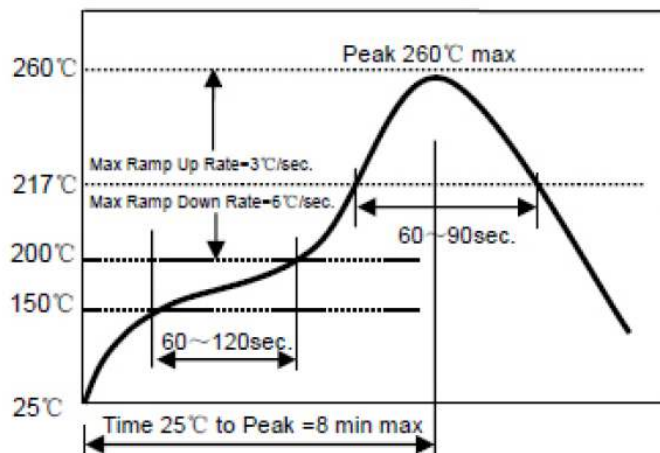
### Recommended Land Pattern



A	B	C	D	E	F
5.8±0.3	5.2±0.3	3.2±0.30	1.80	1.90	5.00

Dimension: mm

## REFLOW PROFILE:



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5.8 x 5.2 x 3.2mm

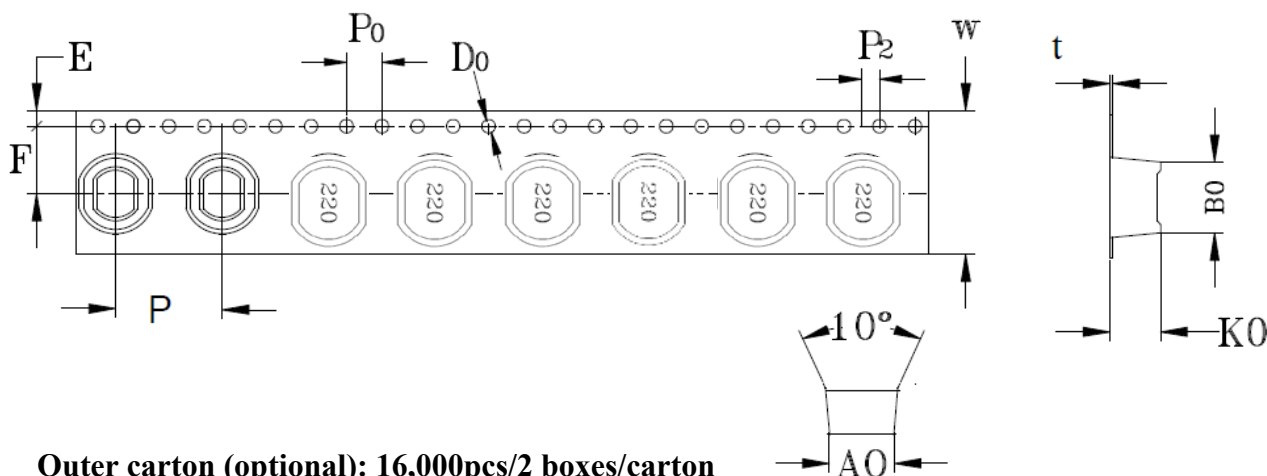
ASPI-0403H



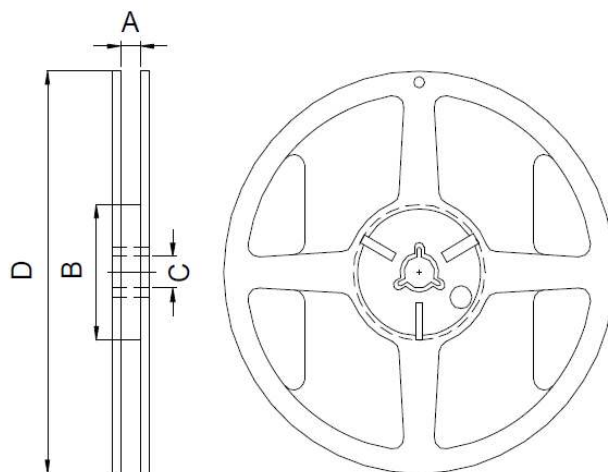
RoHS/RoHS II compliant

## TAPE & REEL:

**Packing** 2,000pcs / tape & reel, 8,000pcs / 4 reels / box  
**Weight:** 0.4 grams / pcs



**Outer carton (optional):** 16,000pcs/2 boxes/carton  
**GW:** 16kg/carton



CARRIER TAPE / SIZE (mm)										REEL 13"×24mm			
A0	B0	K0	F	E	W	P	P <sub>0</sub>	P <sub>2</sub>	t	A	B	C	D
5.6 ± 0.1	6.2 ± 0.1	3.5 ± 0.1	5.5 ± 0.1	1.75 ± 0.1	12 ± 0.3	8 ± 0.1	4 ± 0.1	2 ± 0.1	0.35 ± 0.05	12.4 ± 0.2	100 ± 0.5	13.0 ± 0.2	330 ± 2.0

Dimension: mm

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2 Faraday, Suite# B | Irvine | CA 92618 **Revised: 11.09.15**  
 Ph. 949.546.8000 | Fax. 949.546.8001  
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