

ASPI-0503H-820K-T Datasheet

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DiGi Electronics Part Number	ASPI-0503H-820K-T-DG
Manufacturer	Abracon LLC
Manufacturer Product Number	ASPI-0503H-820K-T
Description	FIXED IND 82UH 650MA 800MOHM SMD
Detailed Description	82 μ H Unshielded Wirewound Inductor 650 mA 800 mOhm Max Nonstandard



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DiGi is a global authorized distributor of electronic components.

Purchase and inquiry

Manufacturer Product Number:

ASPI-0503H-820K-T

Series:

ASPI-0503H

Type:

Wirewound

Inductance:

82 μ H

Current Rating (Amps):

650 mA

Shielding:

Unshielded

Q @ Freq:

-

Ratings:

-

Inductance Frequency - Test:

100 kHz

Package / Case:

Nonstandard

Size / Dimension:

0.228" L x 0.205" W (5.80mm x 5.20mm)

Manufacturer:

Abracon LLC

Product Status:

Active

Material - Core:

-

Tolerance:

\pm 10%

Current - Saturation (Isat):

-

DC Resistance (DCR):

800mOhm Max

Frequency - Self Resonant:

-

Operating Temperature:

-40°C ~ 125°C

Mounting Type:

Surface Mount

Supplier Device Package:

-

Height - Seated (Max):

0.138" (3.50mm)

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8504.50.8000

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99

High Current Unshielded, SMD Power Inductors

ASPI-0503H-820K-T Abracon LLC FIXED IND 820UH 650MA 800MOHM SMD



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:

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

PART NUMBER	INDUCTANCE (uH)	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	0.04	2.80	3R3
ASPI-0503H-4R7	4.7	M	0.05	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	0.17	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	1.00	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

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

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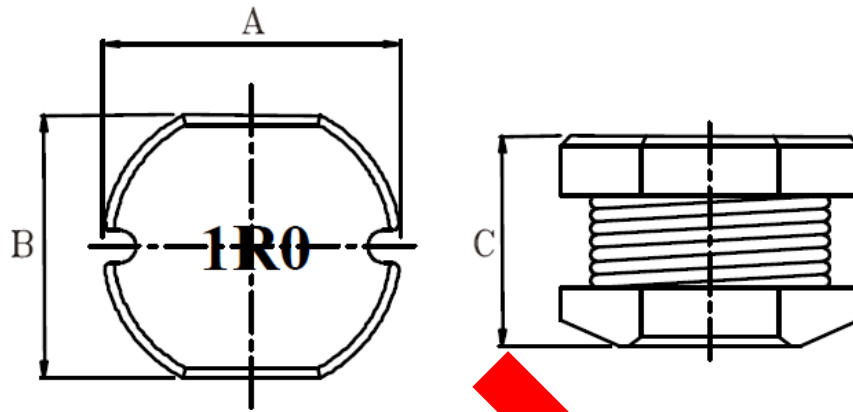
5.8 x 5.2 x 3.2mm

ASPI-0503H

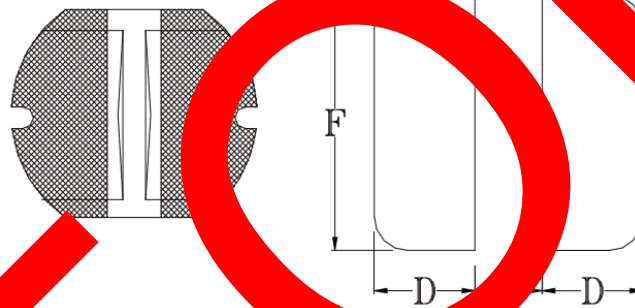


RoHS/RoHS II compliant

OUTLINE DRAWING:



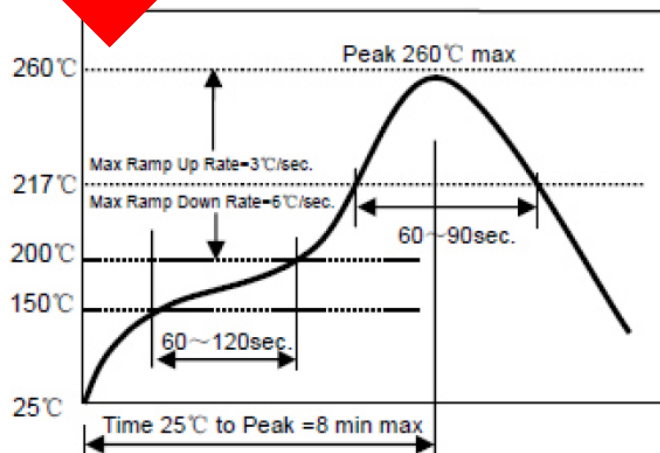
Recommended Land Pattern



	B	C	D	E	F
	5.8±0.1	5.2±0.3	3.2±0.30	1.80	1.90

Dimension: mm

REFLOW PROFILE:



High Current Unshielded, SMD Power Inductors

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5.8 x 5.2 x 3.2mm

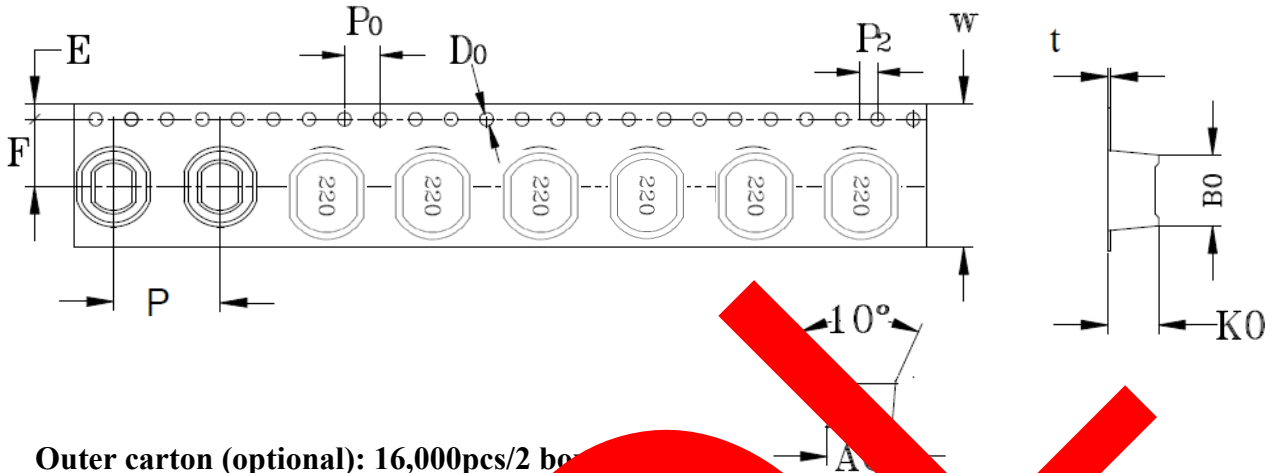
ASPI-0403H



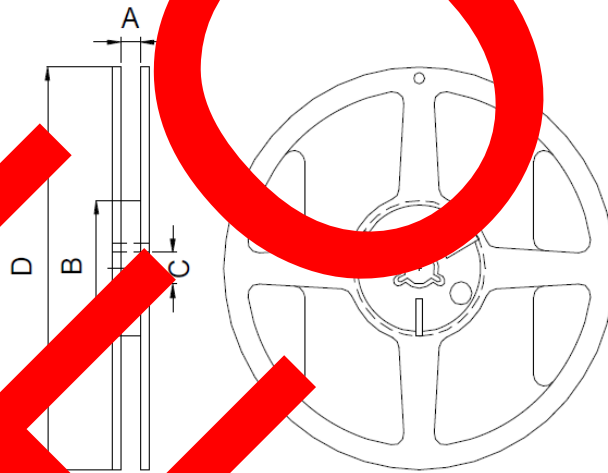
RoHS/RoHS II compliant

TAPE & REEL:

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



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



CARRIER TAPE / SIZE (mm)										REEL 13"×24mm			
A0	B0	K0	F	E	W	P	P ₀	P ₂	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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