

# AIAP-03-681K Datasheet



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DiGi Electronics Part Number	AIAP-03-681K-DG
Manufacturer	<a href="#">Abracon LLC</a>
Manufacturer Product Number	AIAP-03-681K
Description	FIXED IND 680UH 1.05A 548MOHM TH
Detailed Description	680 $\mu$ H Unshielded Wirewound Inductor 1.05 A 548 mOhm Max Axial



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## Purchase and inquiry

Manufacturer Product Number:

AIAP-03-681K

Series:

AIAP-03

Type:

Wirewound

Inductance:

680  $\mu$ H

Current Rating (Amps):

1.05 A

Shielding:

Unshielded

Q @ Freq:

-

Ratings:

-

Inductance Frequency - Test:

1 kHz

Package / Case:

Axial

Size / Dimension:

0.449" Dia x 0.902" L (11.40mm x 22.90mm)

Manufacturer:

Abracon LLC

Product Status:

Active

Material - Core:

-

Tolerance:

$\pm$ 10%

Current - Saturation (Isat):

-

DC Resistance (DCR):

548mOhm Max

Frequency - Self Resonant:

-

Operating Temperature:

-55°C ~ 125°C

Mounting Type:

Through Hole

Supplier Device Package:

-

Height - Seated (Max):

-

## Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8504.50.8000

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99



# Axial Power Inductor


**AIAP-03**

Request Samples



Check Inventory

22.9 x  $\phi$ 11.4mm

RoHS/RoHS II Compliant

MSL Level = N/A

## Features

- Low-cost axial leaded inductors
- High current rating
- Wide inductance range
- Covered with UL heat shrink tubing

## Applications

- Covered with UL heat shrink tubing
- Switching circuits
- TV and audio equipment
- Telecommunication devices
- RF and other filters

## Electrical Specifications

Part No.	L( $\mu$ H)	Tolerance	DCR( $\Omega$ )	I <sub>DC</sub> (A)	Inductance Code
		%	Max	Max	
AIAP-03-3R9	3.9	M	0.007	15.50	3R9M
AIAP-03-4R7	4.7	M	0.008	13.90	4R7M
AIAP-03-5R6	5.6	M	0.011	12.60	5R6M
AIAP-03-6R8	6.8	M	0.013	11.60	6R8M
AIAP-03-8R2	8.2	K	0.017	9.89	8R2K
AIAP-03-100	10	K	0.019	8.70	100K
AIAP-03-120	12	K	0.020	8.21	120K
AIAP-03-150	15	K	0.022	7.34	150K
AIAP-03-180	18	K	0.023	6.64	180K
AIAP-03-220	22	K	0.026	6.07	220K
AIAP-03-270	27	K	0.027	5.36	270K
AIAP-03-330	33	K	0.032	4.83	330K
AIAP-03-390	39	K	0.033	4.36	390K
AIAP-03-470	47	K	0.035	3.98	470K
AIAP-03-560	56	K	0.037	3.66	560K
AIAP-03-680	68	K	0.047	3.31	680K
AIAP-03-820	82	K	0.060	3.10	820K
AIAP-03-101	100	K	0.090	2.79	101K
AIAP-03-121	120	K	0.113	2.54	121K
AIAP-03-151	150	K	0.129	2.22	151K
AIAP-03-181	180	K	0.150	1.98	181K
AIAP-03-221	220	K	0.162	1.89	221K
AIAP-03-271	270	K	0.208	1.63	271K
AIAP-03-331	330	K	0.212	1.51	331K
AIAP-03-391	390	K	0.281	1.39	391K
AIAP-03-471	470	K	0.380	1.24	471K
AIAP-03-561	560	K	0.420	1.17	561K
AIAP-03-681	680	K	0.548	1.050	681K
AIAP-03-821	820	K	0.655	0.970	821K

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22.9 x  $\phi$ 11.4mm  
**RoHS/RoHS II Compliant**  
 MSL Level = N/A

## Electrical Specifications (Cont'd)

Part No.	L( $\mu$ H)	Tolerance	DCR( $\Omega$ )	I <sub>DC</sub> (A)	Inductance Code
		%	Max	Max	
AIAP-03-102	1000	K	0.844	0.870	102K
AIAP-03-122	1200	K	1.04	0.790	122K
AIAP-03-152	1500	K	1.18	0.700	152K
AIAP-03-182	1800	K	1.56	0.640	182K
AIAP-03-222	2200	K	2.00	0.580	222K
AIAP-03-272	2700	K	2.06	0.530	272K
AIAP-03-332	3300	K	2.63	0.470	332K
AIAP-03-392	3900	K	2.75	0.430	392K
AIAP-03-472	4700	K	3.19	0.390	472K
AIAP-03-562	5600	K	3.92	0.359	562K
AIAP-03-682	6800	K	5.69	0.322	682K
AIAP-03-822	8200	K	6.32	0.293	822K
AIAP-03-103	10000	K	7.30	0.266	103K
AIAP-03-123	12000	K	10.0	0.257	123K
AIAP-03-153	15000	K	11.2	0.230	153K
AIAP-03-183	18000	K	15.2	0.210	183K
AIAP-03-223	22000	K	16.8	0.19	223K
AIAP-03-273	27000	K	18.6	0.171	273K
AIAP-03-333	33000	K	26.7	0.155	333K
AIAP-03-393	39000	K	29.0	0.143	393K
AIAP-03-473	47000	K	31.8	0.131	473K
AIAP-03-563	56000	K	42.6	0.119	563K
AIAP-03-683	68000	K	46.9	0.108	683K
AIAP-03-823	82000	K	64.9	0.099	823K
AIAP-03-104	100000	K	71.1	0.098	104K
AIAP-03-124	120000	K	37.0	0.070	124K

### Test Conditions:

Test frequency: 1kHz 0.25Vrms

 I<sub>DC</sub>: 10% inductance drops typical

**Operating Temperature:** -40°C ~ +125 °C (including self-heating)

**Storage Temperature:** -40°C ~ +125 °C

**AIAP-03 is RoHS/RoHS II Compliant and Pb free**

# Axial Power Inductor



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**RoHS/RoHS II Compliant**  
 MSL Level = N/A

## Part Identification

AIAP-03-

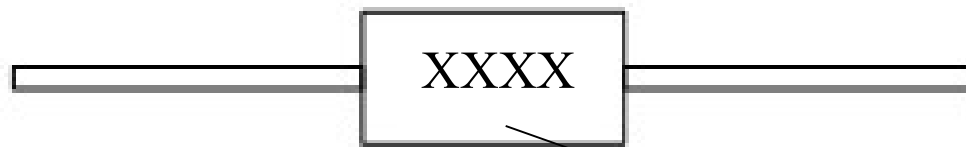
**Inductance Code**

Please refer to the table above

**Tolerance**

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

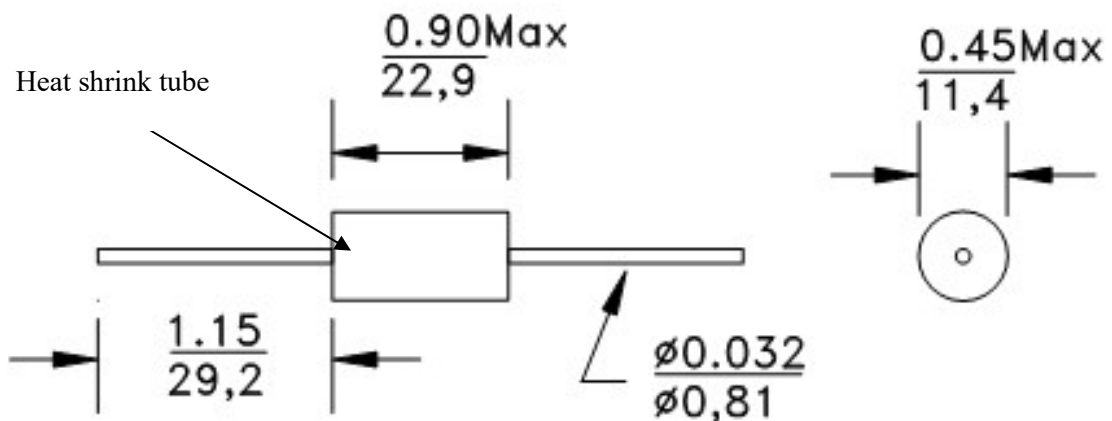
## Marking



Marking Method= Ink Marking

Inductance Code  
 e.g. 101K

## Mechanical Specifications



Dimension: inch/mm



5101 Hidden Creek Ln Spicewood TX 78669  
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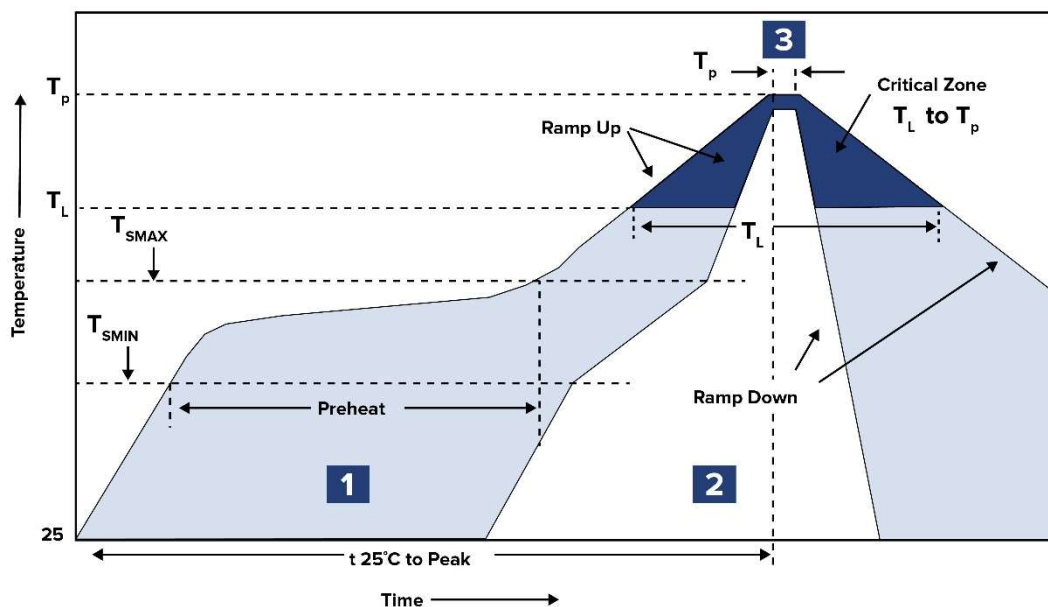


22.9 x  $\phi$ 11.4mm  
 RoHS/RoHS II Compliant  
 MSL Level = N/A

## Packing

64 pcs/plate

## Reflow Profile



Zone	Description	Temperature	Times
1	Preheat	$T_{SMIN} \sim T_{SMAX}$ 150°C ~ 180°C	60 ~ 120 sec.
2	Reflow	$T_L$ 230°C	30 ~ 40 sec.
3	Peak heat	$T_P$ 260°C $\pm$ 5°C	10 sec. MAX

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