

ECN/PCN No.: M1303

For Manufacturer			
Product Description: Axial Power Inductor	Abracon Part Number / Part Series: AIAP-03	<input type="checkbox"/> Documentation only <input checked="" type="checkbox"/> ECN <input type="checkbox"/> EOL	<input checked="" type="checkbox"/> Series <input type="checkbox"/> Part Number
Affected Revision: <p style="text-align: center;">G</p>	New Revision: <p style="text-align: center;">H</p>	Application: <input type="checkbox"/> Safety <input checked="" type="checkbox"/> Non-Safety	

Prior to Change:

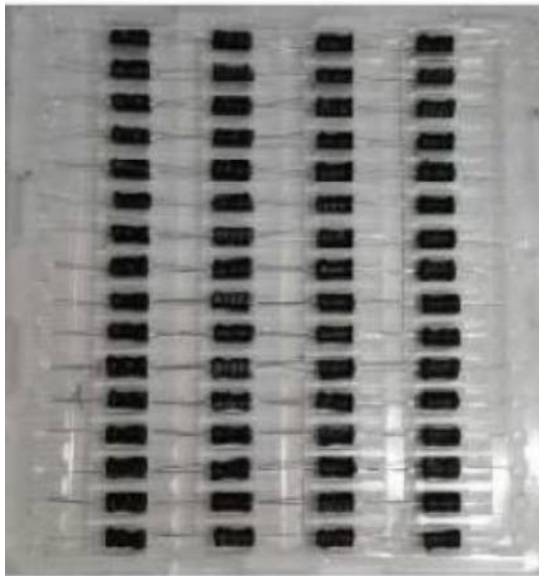
1.0 Key Electrical Specifications

Part No.	L(μ H)	Tolerance	DCR(Ω)	Idc(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	4R7 M
AIAP-03-5R6	5.6	M	0.011	12.60	5R6 M
AIAP-03-6R8	6.8	M	0.013	11.60	6R8 M
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
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

2.0 Packing (100pcs/bag)
After Change:
2.0 Key Electrical Specifications

Part No.	L(μ H)	Tolerance	DCR(Ω)	I _{DC} (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	4R7 M
AIAP-03-5R6	5.6	M	0.011	12.60	5R6 M
AIAP-03-6R8	6.8	M	0.013	11.60	6R8 M
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
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

3.0 Packing (64pcs/Plate)


Cause/Reason for Change: Update to the packaging information to 64pcs/plat, Introduced the following PNs to the series 183K, 223K, 273K, 333K, 393K, 473K, 563K, 683K, 823K, 104K, 124K

Change Plan

Effective Date:	Additional Remarks:
------------------------	----------------------------

Change Declaration: The change does not affect fit or function of the devices in the series.

Issued Date: 9/16/2012	Issued By: Ahmed Alamin	Issued Department: Engineering
Approval: Syed Raza Engineering VP	Approval: Reuben Quintanilla Quality Director	Approval: Ying Huang Purchasing Director

For Abracon EOL only

Last Time Buy (if applicable):	Alternate Part Number / Part Series:
---------------------------------------	---

Additional Approval:	Additional Approval:	Additional Approval:
-----------------------------	-----------------------------	-----------------------------

Customer Approval (If Applicable)

Qualification Status:

Approved Not accepted

Note: It is considered approved if there is no feedback from the customer 1 month after ECN/PCN is released.

Customer Part Number:	Customer Project:
------------------------------	--------------------------

Company Name:	Company Representative:	Representative Signature:
----------------------	--------------------------------	----------------------------------

Customer Remarks:

Affected part numbers

AIAP-03-3R9M

AIAP-03-4R7M

AIAP-03-5R6M

AIAP-03-6R8M

AIAP-03-8R2K

AIAP-03-100K

AIAP-03-120K

AIAP-03-150K

AIAP-03-180K

AIAP-03-220K

AIAP-03-270K

AIAP-03-330K

AIAP-03-390K

AIAP-03-470K

AIAP-03-560K

AIAP-03-680K

AIAP-03-820K

AIAP-03-101K

AIAP-03-121K

AIAP-03-151K

AIAP-03-181K

AIAP-03-221K

AIAP-03-271K

AIAP-03-331K

AIAP-03-391K

AIAP-03-471K

AIAP-03-561K

AIAP-03-681K

AIAP-03-821K

AIAP-03-102K

AIAP-03-122K

AIAP-03-152K

AIAP-03-182K

AIAP-03-222K

AIAP-03-272K

AIAP-03-332K

AIAP-03-392K

AIAP-03-472K

AIAP-03-562K

AIAP-03-682K

AIAP-03-822K

AIAP-03-103K

AIAP-03-123K

AIAP-03-153K

AIAP-03-183K

AIAP-03-223K

AIAP-03-273K

AIAP-03-333K

AIAP-03-393K

AIAP-03-473K

AIAP-03-563K

AIAP-03-683K

AIAP-03-823K

AIAP-03-104K

AIAP-03-124K

Axial Power Inductor



AIAP-03

Request Samples



Check Inventory



22.9 x ϕ 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(μ H)	Tolerance	DCR(Ω)	I _{DC} (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

Axial Power Inductor



AIAP-03

Request Samples



Check Inventory



22.9 x ϕ 11.4mm

RoHS/RoHS II Compliant

MSL Level = N/A

Electrical Specifications (Cont'd)

Part No.	L(μ H)	Tolerance	DCR(Ω)	I _{DC} (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_{DC}: 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



AIAP-03

Request Samples



Check Inventory



22.9 x ϕ 11.4mm
RoHS/RoHS II Compliant
MSL Level = N/A

Part Identification

AIAP-03-

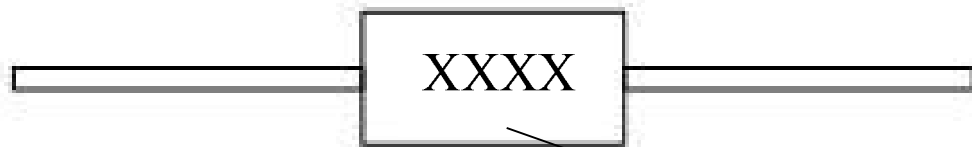
Inductance Code

Please refer to the table above

Tolerance

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

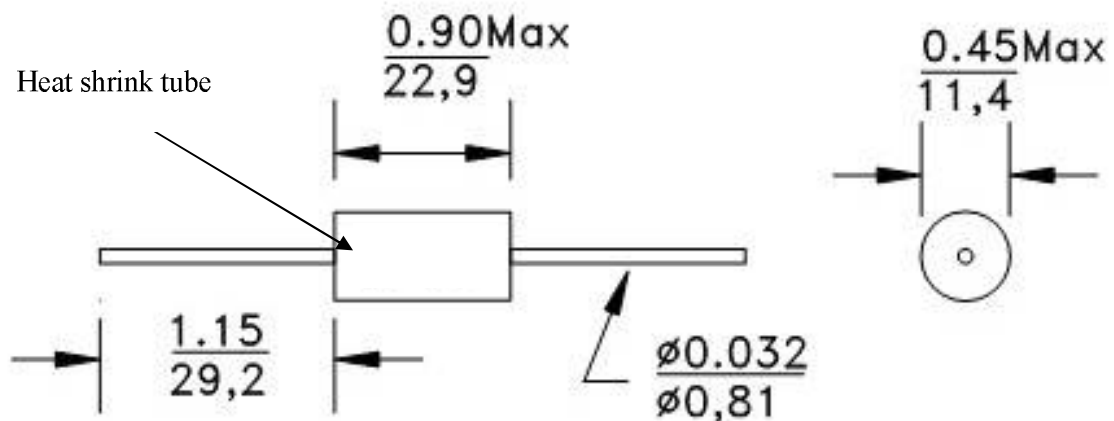
Marking



Marking Method= Ink Marking

Inductance Code
e.g. 101K

Mechanical Specifications



Dimension: inch/mm



5101 Hidden Creek Ln Spicewood TX 78669
Phone: 512-371-6159 | Fax: 512-351-8858
For terms and conditions of sales, please visit:
www.abracon.com

REVISED: 09-16-21

ABRACON IS
ISO9001-2015
CERTIFIED

Axial Power Inductor



AIAP-03

Request Samples



Check Inventory

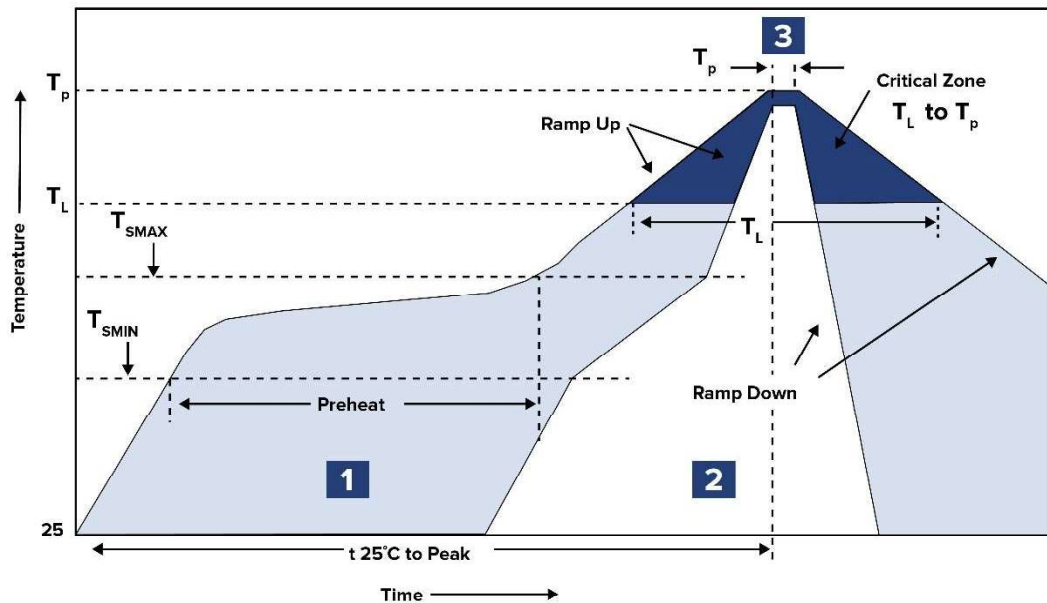


22.9 x ϕ 11.4mm
RoHS/RoHS II Compliant
 MSL Level = N/A

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

ATTENTION: Abracon LLC's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependent Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon LLC is required. Please contact Abracon LLC for more information.



5101 Hidden Creek Ln Spicewood TX 78669
 Phone: 512-371-6159 | Fax: 512-351-8858
 For terms and conditions of sales, please visit:
www.abracon.com

REVISED: 09-16-21

ABRACON IS
 ISO9001-2015
 CERTIFIED