

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-

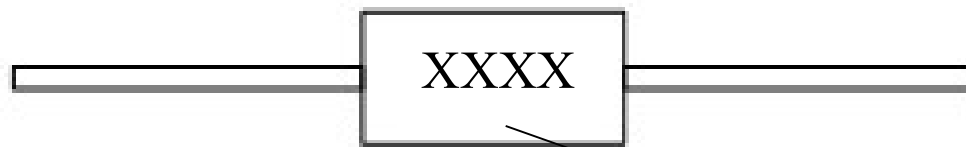
Inductance Code

Please refer to the table above

Tolerance

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

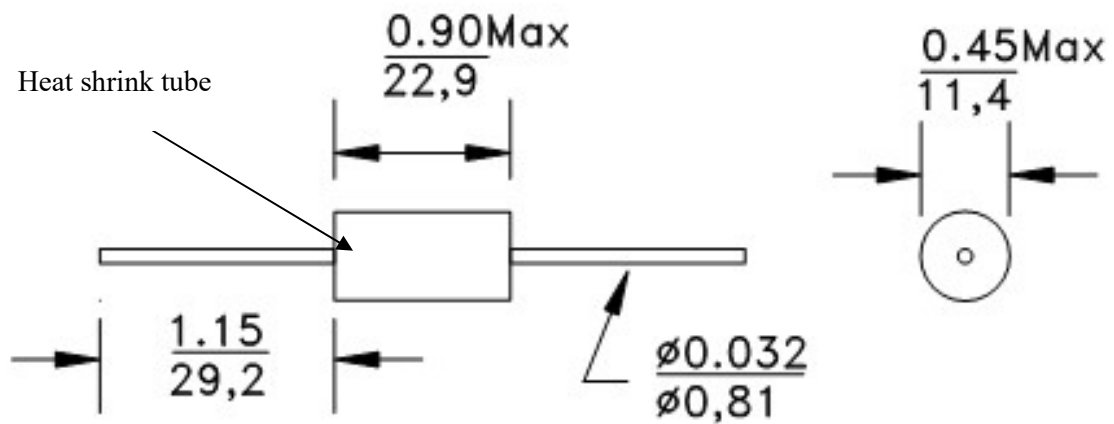
Marking



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

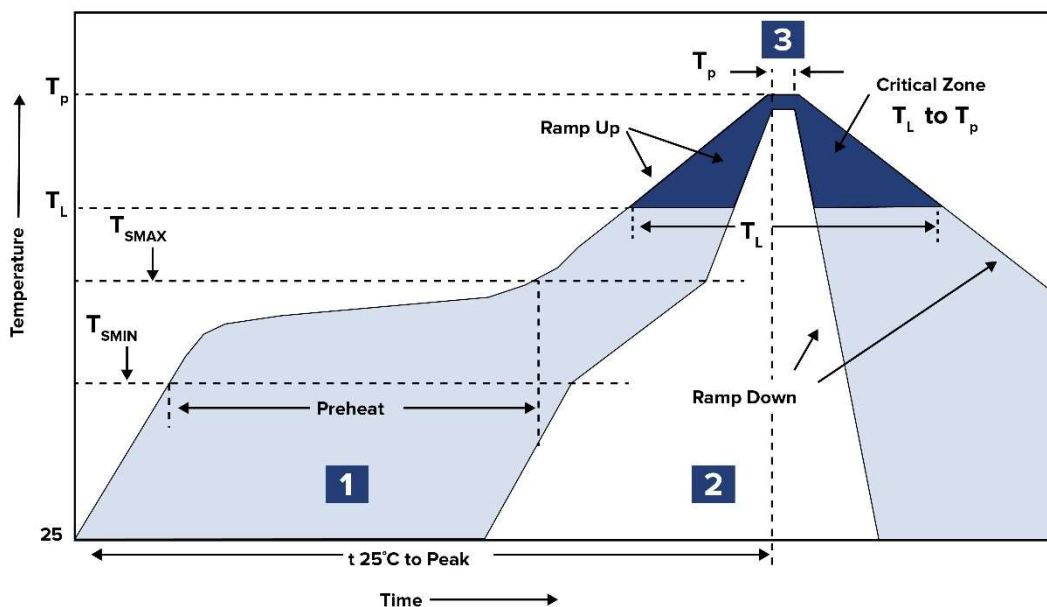


22.9 x ϕ 11.4mm
 RoHS/RoHS II Compliant
 MSL Level = N/A

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