ECN/PCN No.: M1202

For Manufacturer			
Product Description: Unshielded Radial Power Inductor	**Abracon Part Number / Part Series:** AIUR-06 Series	☐ Documentation only ☒ ECN ☐ EOL	☒ Series ☐ Part Number(s)
Affected Revision: D	**New Revision:** E	**Application:**	☐ Safety ☒ Non-Safety

Prior to Change:

1.0 Key Electrical Specifications

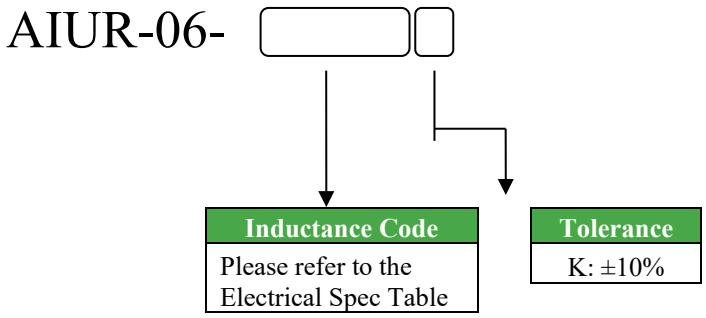
Part Number	Inductance	Tolerance	DCR (Max)	Saturation Current (Max)	Temperature Rise Current (Max)	Inductance Code
Units	µH	%	Ω	A	A	
Symbol	L	K	DCR	Isat	I_{DC}	
AIUR-06-3R9	3.9	K	0.016	14.2	6.5	3R9K
AIUR-06-4R7	4.7	K	0.018	13.0	6.2	4R7K
AIUR-06-5R6	5.6	K	0.021	11.0	5.9	5R6K
AIUR-06-6R8	6.8	K	0.023	10.0	5.6	6R8K
AIUR-06-8R2	8.2	K	0.026	9.5	5.3	8R2K
AIUR-06-100	10	K	0.031	8.8	5.0	100K
AIUR-06-120	12	K	0.036	7.9	4.6	120K
AIUR-06-150	15	K	0.040	7.1	4.4	150K
AIUR-06-180	18	K	0.041	7.4	4.2	180K
AIUR-06-220	22	K	0.043	6.1	4.0	220K
AIUR-06-270	27	K	0.046	5.5	3.8	270K
AIUR-06-330	33	K	0.051	5.2	3.6	330K
AIUR-06-390	39	K	0.054	4.5	3.3	390K
AIUR-06-470	47	K	0.063	4.1	3.2	470K
AIUR-06-560	56	K	0.075	3.8	2.7	560K
AIUR-06-680	68	K	0.078	3.5	2.4	680K
AIUR-06-820	82	K	0.088	3.1	2.2	820K
AIUR-06-101	100	K	0.108	2.8	2.1	101K
AIUR-06-121	120	K	0.127	2.6	2.0	121K
AIUR-06-151	150	K	0.162	2.4	1.9	151K
AIUR-06-181	180	K	0.228	2.1	1.6	181K
AIUR-06-221	220	K	0.252	1.9	1.5	221K
AIUR-06-271	270	K	0.270	1.75	1.4	271K
AIUR-06-331	330	K	0.394	1.62	1.3	331K
AIUR-06-391	390	K	0.416	1.40	1.1	391K
AIUR-06-471	470	K	0.568	1.30	1.0	471K
AIUR-06-561	560	K	0.650	1.20	0.95	561K
AIUR-06-681	680	K	0.740	1.10	0.82	681K
AIUR-06-821	820	K	1.0	0.96	0.75	821K
AIUR-06-102	1000	K	1.2	0.88	0.65	102K
AIUR-06-122	1200	K	1.5	0.80	0.61	122K
AIUR-06-152	1500	K	1.7	0.72	0.54	152K
AIUR-06-182	1800	K	1.8	0.66	0.46	182K
AIUR-06-222	2200	K	2.4	0.60	0.41	222K
AIUR-06-272	2700	K	2.8	0.54	0.39	272K
AIUR-06-332	3300	K	3.7	0.48	0.35	332K
AIUR-06-392	3900	K	5.0	0.42	0.31	392K
AIUR-06-472	4700	K	5.6	0.40	0.28	472K
AIUR-06-562	5600	K	6.3	0.37	0.25	562K
AIUR-06-682	6800	K	8.4	0.34	0.22	682K
AIUR-06-822	8200	K	9.6	0.31	0.20	822K
AIUR-06-103	10000	K	10.5	0.29	0.16	103K
AIUR-06-123	12000	K	14.5	0.25	0.13	123K
AIUR-06-153	15000	K	20.5	0.23	0.10	153K

2.1 **Test Conditions and equipments**
Test frequency: 1kHz, 0.1Vrms
Isat: max. 10% inductance drop from initial value
IDC: The DC current at which the temperature rise is 40ºC max

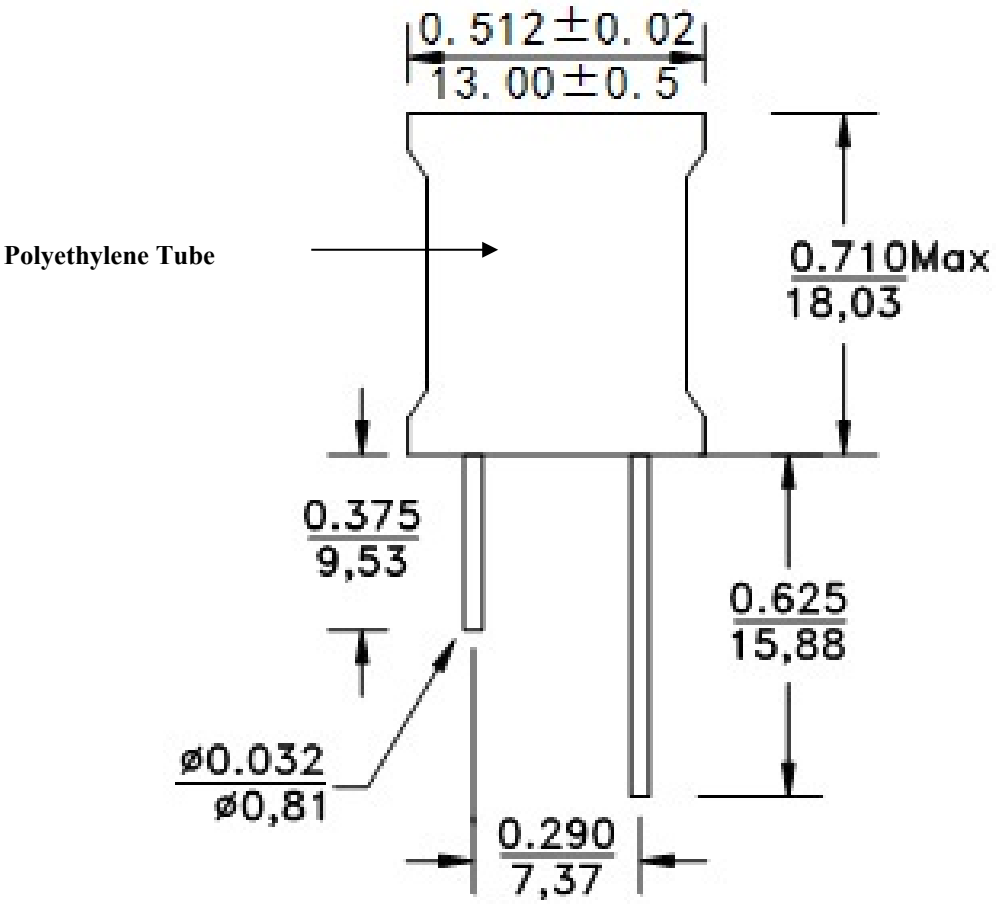
2.2 **Operating Temperature:** -25ºC ~ +85ºC

2.3 **Storage Temperature:** -25ºC ~ +85ºC

3.0 **Part Number Identification**



4.0 Mechanical Dimensions



Dimension: inch / mm

5.0 Packing (250pcs / Box)

After Change:

2.0 Key Electrical Specifications

Part Number	Inductance	Tolerance	DCR (Max)	Saturation Current (Max)	Temperature Rise Current (Max)	Inductance Code
Units	µH	%	Ω	A	A	
Symbol	L	K	DCR	Isat	I_{DC}	
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AIUR-06-123	12000	J,K	14.5	0.25	0.13	123K
AIUR-06-153	15000	J,K	20.5	0.23	0.10	153K

5.1 Test Conditions and equipments

Test frequency: 1kHz, 0.25Vrms
Isat: max. 10% inductance drop from initial value
IDC: The DC current at which the temperature rise is 40ºC max

5.2 **Operating Temperature:** -40ºC ~ +125ºC (Including Self-heating）

5.3 **Storage Temperature:** -40ºC ~ +125ºC

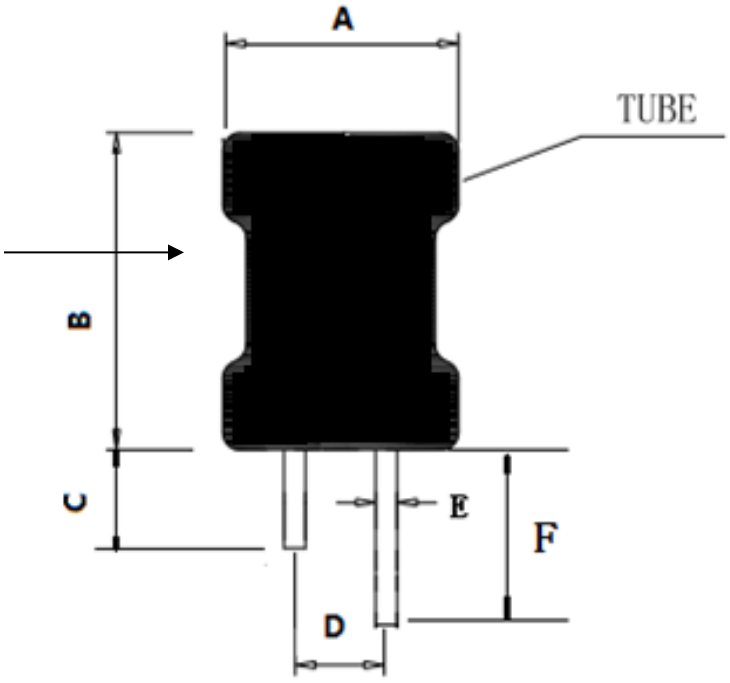
5.4 **Operating Voltage (COILS-CORE): 500V MAX**

6.0 **Part Number Identification**

AIUR-06- ☐☐

Inductance Code	Tolerance
Please refer to the Electrical Spec Table	J: ±5% K: ±10%

7.0 **Mechanical Dimensions**



A	B	C	D	E	F
13.5 MAX	18.0 MAX	9.5 ±1	7.5 REF	0.8	15.8 ±1

Dimension: mm

8.0 Packing (200pcs / Bag)

Cause/Reason for Change: Moving the series to a new production line, lower tolerance on some parts, change in operating temperature range, testing conditionsand, pcs/bag

Change Plan

Effective Date:	**Additional Remarks:**
12/3/2020	

Change Declaration:

The change does not affect form, fit or function of the series. Wider operating temperature, update to the testing conditions, graphics, pcs/Bag.

The tolerance decreased on the following parts:

AIUR-06-101
AIUR-06-121
AIUR-06-151
AIUR-06-181
AIUR-06-221
AIUR-06-271
AIUR-06-331
AIUR-06-391
AIUR-06-471
AIUR-06-561
AIUR-06-681
AIUR-06-821
AIUR-06-102
AIUR-06-122
AIUR-06-152
AIUR-06-182
AIUR-06-222
AIUR-06-272
AIUR-06-332
AIUR-06-392
AIUR-06-472
AIUR-06-562
AIUR-06-682
AIUR-06-822
AIUR-06-103
AIUR-06-123

AIUR-06-153		
Issued Date: 12/3/2020	**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:		