

ECN/PCN No.: M1624

### For Manufacturer

<b>Product Description:</b>  AIR-CORE Power Inductors	<b>Abrakon Part Number / Part Series:</b> AIAC-0805C, AIAC-1008C, AIAC-2712C	<input type="checkbox"/> Documentation only <input checked="" type="checkbox"/> Series <input type="checkbox"/> ECN <input type="checkbox"/> Part Number(s) <input checked="" type="checkbox"/> EOL
<b>Affected Revision:</b> Multiple	<b>New Revision:</b> EOL	<b>Application:</b> <input type="checkbox"/> Safety <input checked="" type="checkbox"/> Non-Safety
<b>Prior to Change:</b> Lifecycle status = Active		
<b>After Change:</b> Lifecycle status = EOL		
<b>Cause/Reason for Change:</b> As part of an effort to streamline our portfolio and better serve customers, we are discontinuing select products and offering an extended Last Time Buy period.		

### Change Plan

<b>Effective Date:</b> 10/07/2025	<b>Additional Remarks:</b>	
<b>Change Declaration:</b> These series have been discontinued.		
<b>Issued Date:</b> 7/09/2025	<b>Issued By:</b> Gerald Capwell	<b>Issued Department:</b> Engineering
<b>Approval:</b> Syed Raza Engineering VP	<b>Approval:</b> Reuben Quintanilla Quality Director	<b>Approval:</b> Ying Huang Purchasing Director

### For Abracon EOL only

<b>Last Time Buy (if applicable):</b> 12/31/2025	<b>Alternate Part Number / Part Series:</b>
<b>Additional Approval:</b>	<b>Additional Approval:</b>

### Customer Approval (If Applicable)

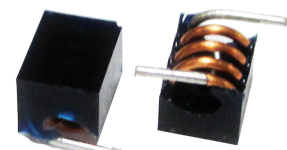
<b>Qualification Status:</b> <div style="text-align: center;"> <input type="checkbox"/> Approved    <input type="checkbox"/> Not accepted </div> <p style="font-size: small; color: #0056b3;">Note: It is considered approved if there is no feedback from the customer 1 month after ECN/PCN is released.</p>		
<b>Customer Part Number:</b>	<b>Customer Project:</b>	
<b>Company Name:</b>	<b>Company Representative:</b>	<b>Representative Signature:</b>
<b>Customer Remarks:</b>		

# SMT Air Coil Inductor

AIAC-0805C



**RoHS**  
Compliant



2.85 x 1.80 x 2.10mm

## FEATURES:

- High current design
- Wide Range Frequency Response
- Excellent Q & SRF
- Standard flat cap top suitable for automatic placement.

## APPLICATIONS:

- Widely used in Cordless Phones, High Frequency Communication Equipments, Intercom, CATV,RFID
- Suitable for metal sensors and proximity sensors
- Noise suppression for RF power supply/bias
- I/O filtering, frequency selection for audio devices such as Loudspeakers,Hifi
- Impedance Matching for transceivers
- Improves switch isolation for RF circuit

## STANDARD SPECIFICATIONS:

### PARAMETERS

ABRACON P/N:	AIAC-0805C
Operating temperature:	-40 °C ~ +125 °C
Storage temperature:	-25°C to + 60°C

Part Number	Inductance	Tolerance	DCR (Max)	Q(Min)	SRF(Min)	Rated Current (Max)	Inductance Code
Units	nH	%	mΩ		MHz	mA	
Symbol	L	K	DCR			IDC	
AIAC-0805C-3N9	3.9	K	2.6	80	>3000	1200	3N9
AIAC-0805C-4N7	4.7	K	3.6	80	>3000	900	4N7
AIAC-0805C-5N6	5.6	K	3.7	80	>3000	950	5N6
AIAC-0805C-6N8	6.8	K	4.5	80	>3000	900	6N8
AIAC-0805C-8N2	8.2	K	5.3	80	>3000	840	8N2
AIAC-0805C-10N	10	K	5.4	70	>3000	900	10N
AIAC-0805C-12N	12	K	6.3	70	>3000	900	12N
AIAC-0805C-15N	15	K	7.2	70	2500	900	15N
AIAC-0805C-18N	18	K	12.5	70	2500	500	18N
AIAC-0805C-22N	22	K	12.9	70	2400	550	22N
AIAC-0805C-27N	27	K	14.5	70	1600	550	27N
AIAC-0805C-33N	33	K	18.7	70	1600	500	33N

## Test Conditions and equipments

Test frequency: 300MHz

Equipment: HP4286A/HP16191A

## PART IDENTIFICATION:

AIAC-0805C-   -

### Inductance Code

Please refer to the  
Electrical Spec Table

### Tolerance

K: ±10%

### Packaging

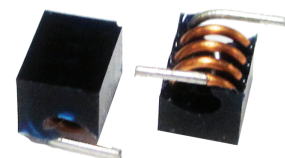
T: Tape and Reel  
(4kpcs / reel)

# SMT Air Coil Inductor

AIAC-0805C

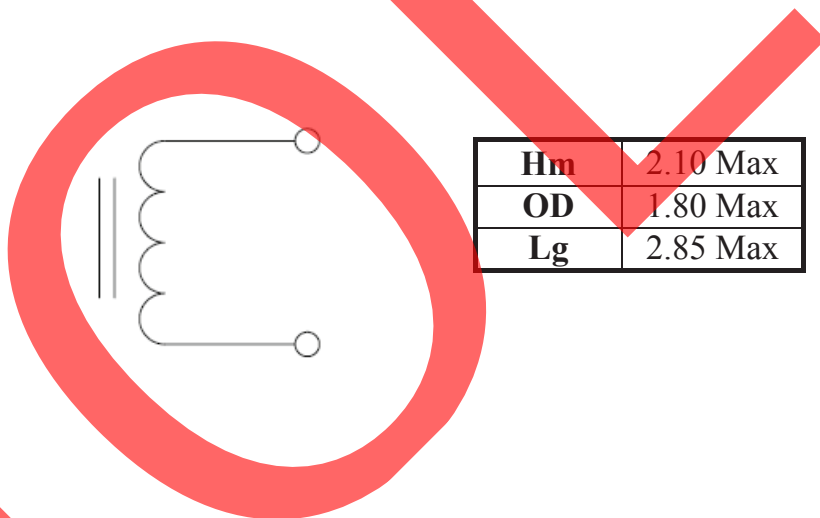
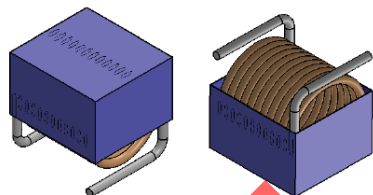
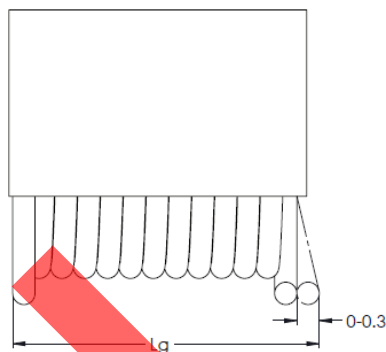
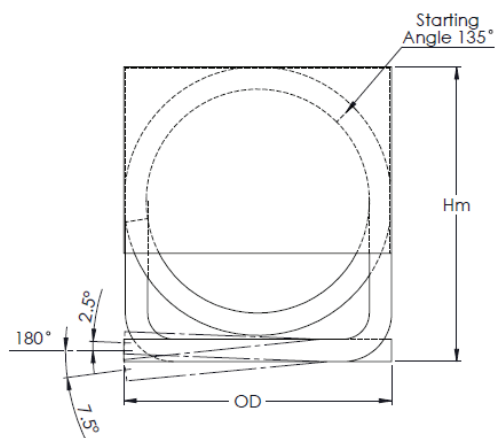


**RoHS**  
Compliant



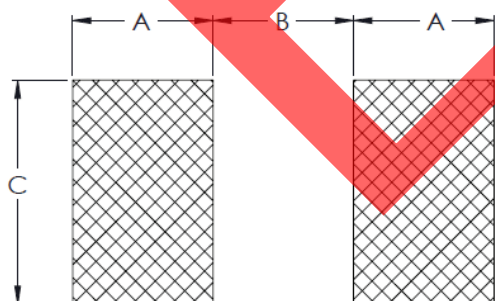
2.85 x 1.80 x 2.10mm

## OUTLINE DRAWING:



<b>Hm</b>	2.10 Max
<b>OD</b>	1.80 Max
<b>Lg</b>	2.85 Max

## Recommended Land Pattern



<b>A</b>	1.02 Min
<b>B</b>	0.76 Min
<b>C</b>	1.78 Min

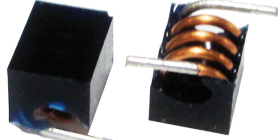
Dimension: mm

# SMT Air Coil Inductor

AIAC-0805C

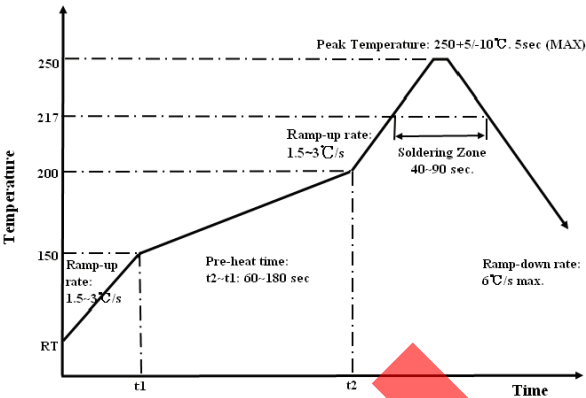


RoHS  
Compliant



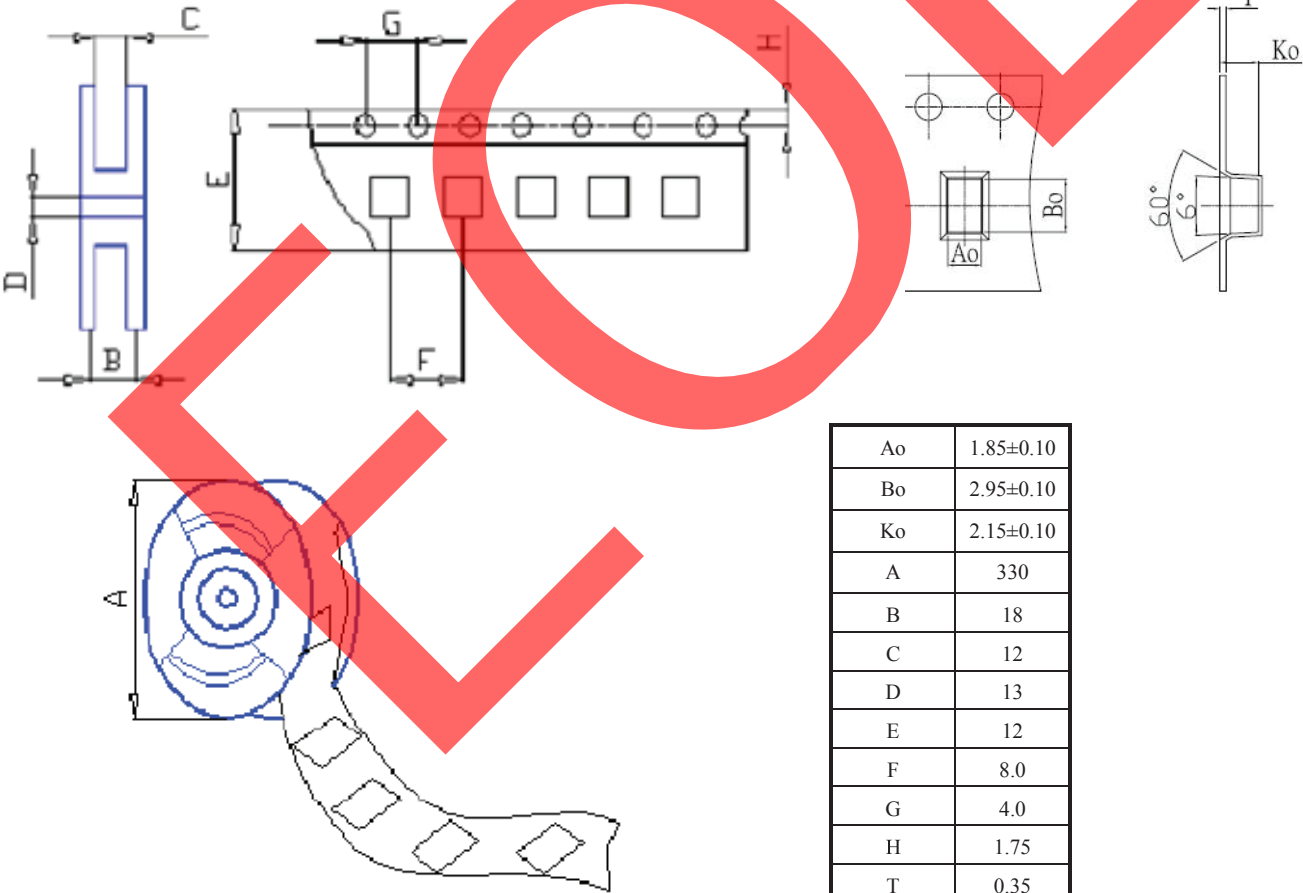
2.85 x 1.80 x 2.10mm

## REFLOW PROFILE:



## TAPE & REEL:

Packing  
T: 4,000pcs / reel



Dimension: mm

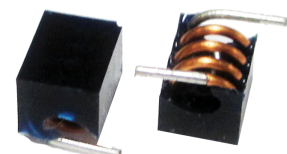
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# SMT Air Coil Inductor

AIAC-1008C



**RoHS**  
Compliant



3.20 x 1.90 x 2.20mm

## FEATURES:

- High current design
- Wide Range Frequency Response
- Excellent Q & SRF
- Standard flat cap top suitable for automatic placement.

## APPLICATIONS:

- Widely used in Cordless Phones, High Frequency Communication Equipments, Intercom, CATV, RFID
- Suitable for metal sensors and proximity sensors
- Noise suppression for RF power supply/bias
- I/O filtering, frequency selection for audio devices such as Loudspeakers, Hifi
- Impedance Matching for transceivers
- Improves switch isolation for RF circuit

## STANDARD SPECIFICATIONS:

ABRACON P/N:	AIAC-1008C
Operating temperature:	-40 °C ~ +125 °C
Storage temperature:	-25°C to + 60°C

Part Number	Inductance	Tolerance	DCR (Max)	Q(Min)	SRF(Min)	Rated Current (Max)	Inductance Code
Units	nH	%	mΩ		MHz	mA	
Symbol	L	K	DCR			IDC	
AIAC-1008C-6N8	6.8	K	4.0	80	>3000	1200	6N8
AIAC-1008C-8N2	8.2	K	5.0	80	>3000	950	8N2
AIAC-1008C-10N	10	K	6.0	70	>3000	950	10N
AIAC-1008C-12N	12	K	6.5	70	>3000	900	12N
AIAC-1008C-15N	15	K	7.3	70	2500	900	15N
AIAC-1008C-18N	18	K	9.6	70	2500	840	18N
AIAC-1008C-22N	22	K	10.8	70	2400	840	22N
AIAC-1008C-27N	27	K	13.9	70	1600	600	27N
AIAC-1008C-33N	33	K	19.5	70	1600	500	33N
AIAC-1008C-39N	39	K	21.6	70	1500	500	39N

## Test Conditions and equipments

Test frequency: 300MHz

Equipment: HP4286A/HP16191A

## PART IDENTIFICATION:

AIAC-1008C---

### Inductance Code

Please refer to the  
Electrical Spec Table

### Tolerance

K: ±10%

### Packaging

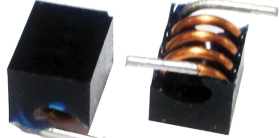
T: Tape and Reel  
(4kpcs / reel)

# SMT Air Coil Inductor

AIAC-1008C

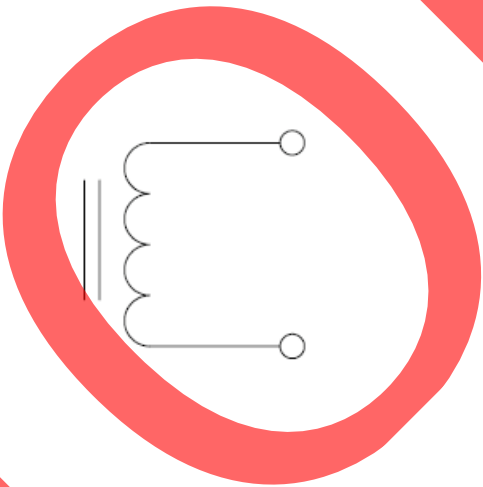
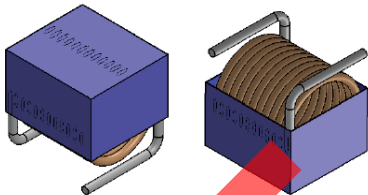
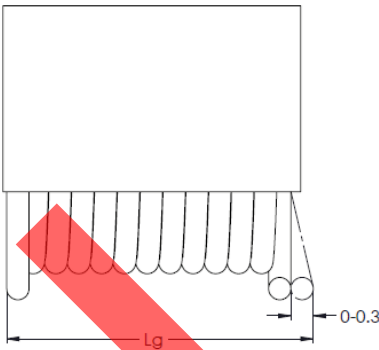
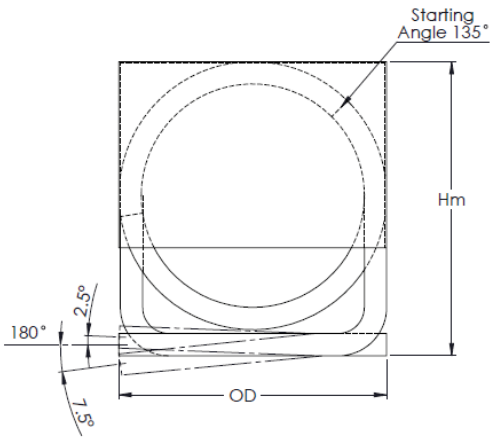


RoHS  
Compliant



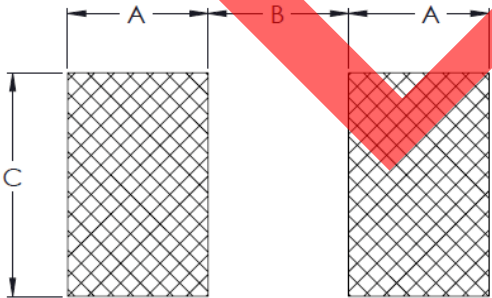
3.20 x 1.90 x 2.20mm

## OUTLINE DRAWING:



Hm	2.20 Max
OD	1.90 Max
Lg	3.20 Max

### Recommended Land Pattern



A	1.02 Min
B	1.27 Min
C	2.54 Min

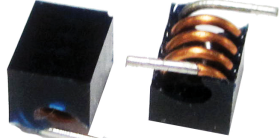
Dimension: mm

# SMT Air Coil Inductor

AIAC-1008C

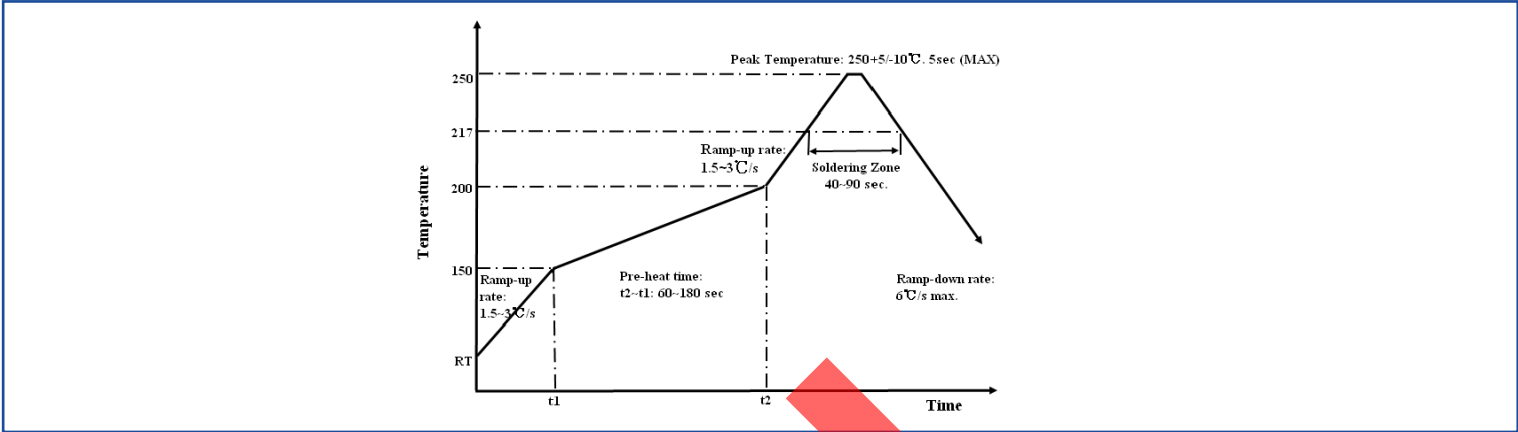


RoHS  
Compliant



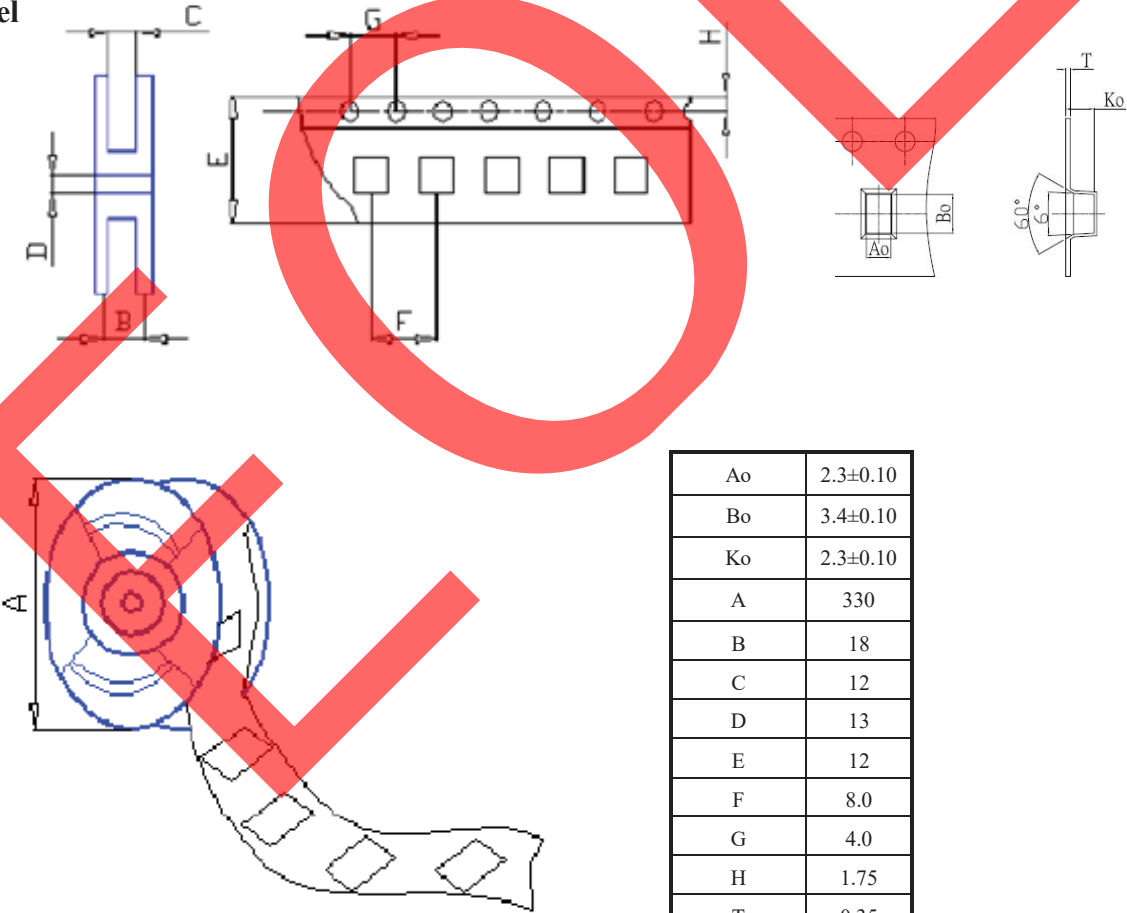
3.20 x 1.90 x 2.20mm

## REFLOW PROFILE:



## TAPE & REEL:

Packing  
T: 4,000pcs / reel



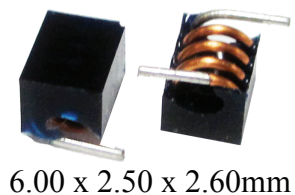
Dimension: mm

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# SMT Air Coil Inductor

AIAC-2712C

RoHS  
Compliant



6.00 x 2.50 x 2.60mm

## FEATURES:

- High current design
- Wide Range Frequency Response
- Excellent Q & SRF
- Standard flat cap top suitable for automatic placement.

## APPLICATIONS:

- Widely used in Cordless Phones, High Frequency Communication Equipments, Intercom, CATV, RFID
- Suitable for metal sensors and proximity sensors
- Noise suppression for RF power supply/bias
- I/O filtering, frequency selection for audio devices such as Loudspeakers, Hifi
- Impedance Matching for transceivers
- Improves switch isolation for RF circuit

## STANDARD SPECIFICATIONS:

PARAMETERS	
ABRACON P/N:	AIAC-2712C
Operating temperature:	-40 °C ~ +125 °C
Storage temperature:	-25°C to + 60°C

Part Number	Inductance	Tolerance	DCR (Max)	Q(Min)	SRF(Min)	Rated Current (Max)	Inductance Code
Units	nH	%	mΩ		GHz	A	
Symbol	L	J	DCR			IDC	
AIAC-2712C-17N5	17.50	J	4.5	100.0	2.2	3.5	17N5J
AIAC-2712C-22N0	22.00	J	5.0	100.0	2.0	3.0	22N0J
AIAC-2712C-28N0	28.00	J	5.6	100.0	1.8	2.8	28N0J
AIAC-2712C-35N5	35.50	J	6.2	100.0	1.2	2.7	35N5J
AIAC-2712C-43N5	43.50	J	6.7	100.0	1.0	2.5	43N5J

## Test Conditions and equipments

Test frequency: 150MHz

Equipment: HP4191A

## PART IDENTIFICATION:

AIAC-2712C--

### Inductance Code

Please refer to the  
Electrical Spec Table

### Tolerance

J: ±5%

### Packaging

T: Tape and Reel  
(2,000kpcs / reel)

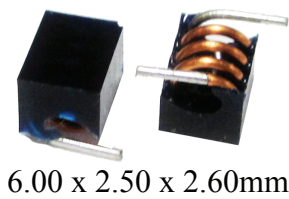




# SMT Air Coil Inductor

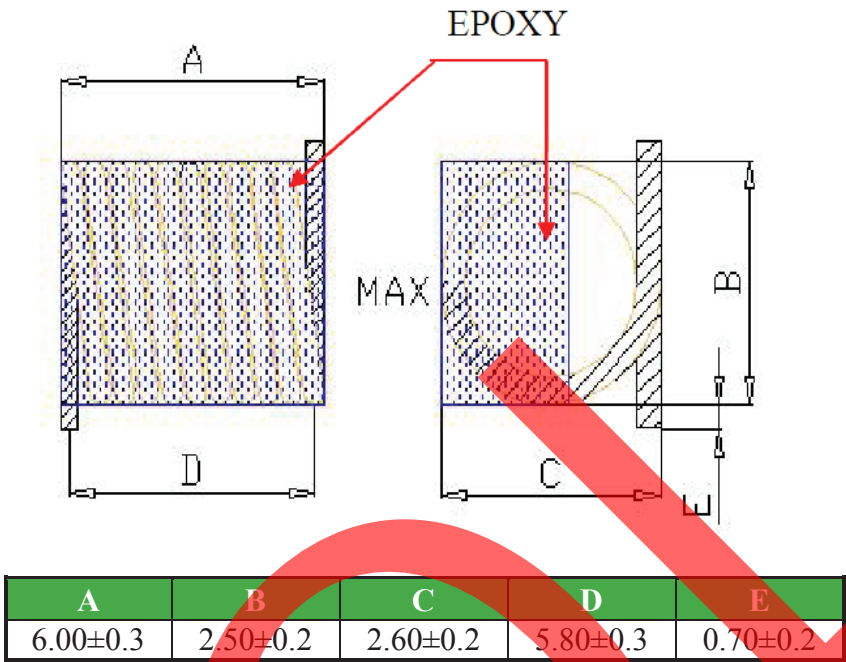
AIAC-2712C

RoHS  
Compliant



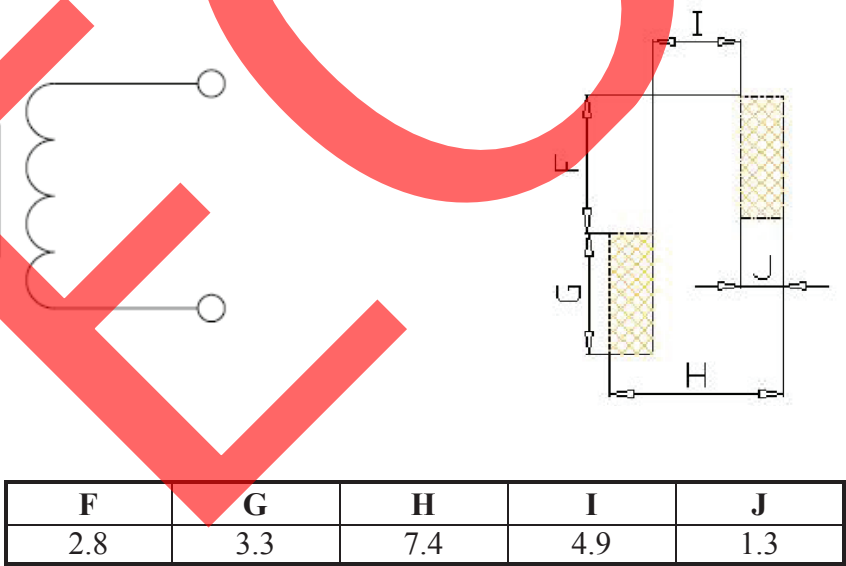
6.00 x 2.50 x 2.60mm

## OUTLINE DRAWING:



Schematic

Recommended Land Pattern

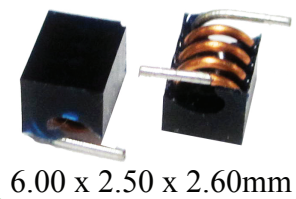


Dimension: mm

# SMT Air Coil Inductor

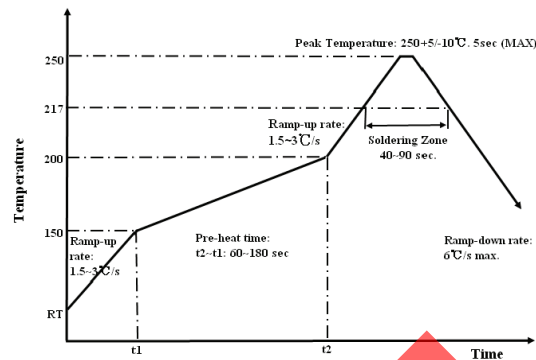
AIAC-2712C

RoHS  
Compliant



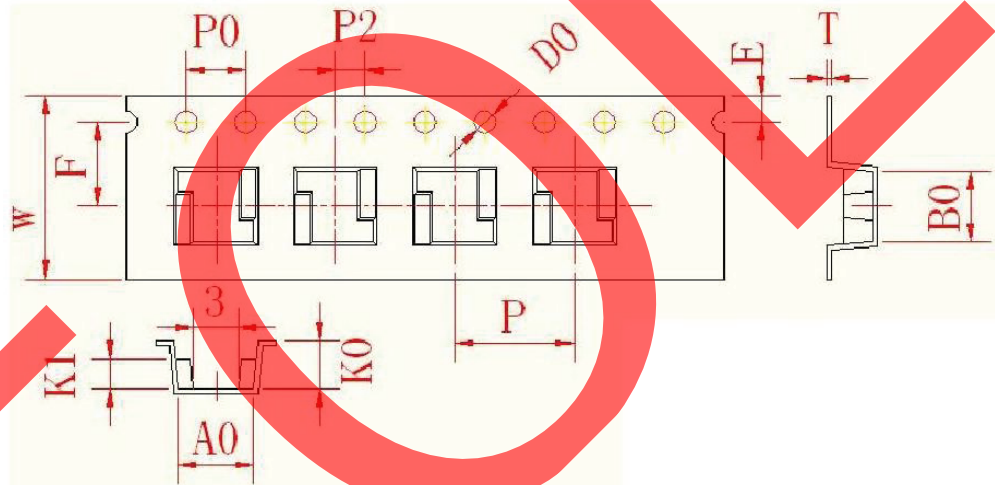
6.00 x 2.50 x 2.60mm

## REFLOW PROFILE:

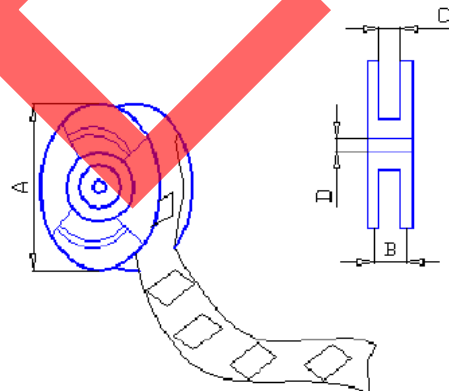


## TAPE & REEL:

Packing  
T: 2,000pcs / reel



W	A0	B0	K0	K1	P	F	E	D0	P0	P2	T
16.0±0.3	4.7±0.1	6.8±0.1	3.2±0.1	2.0±0.1	8.0±0.1	7.5±0.1	1.75±0.1	1.5+0.1/-0	4.0±0.1	2.0±0.1	0.35±0.05



A	330
B	22
C	16
D	13

Dimension: mm

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ABRACON IS  
ISO 9001:2008  
CERTIFIED



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Revised: 11.20.12