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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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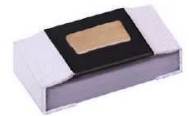
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# THIN FILM CHIP INDUCTORS

ATFC-0402

 RoHS/RoHS II Compliant



1.00 x 0.50 x 0.32mm

## FEATURES:

- Photolithographic single layer ceramic chip
- High SRF, excellent Q, superior temperature stability
- Tight tolerance  $\pm 0.1\text{nH}$  available
- Self resonant frequency controlled within 10%
- Stable inductance in high frequency circuit
- Highly stable design for critical needs

## APPLICATIONS:

- Cell phones and GPS
- VCO, TCXO Circuit and RF Transceiver Module
- Wireless LAN, Bluetooth Module, Communication Appliances

## STANDARD SPECIFICATIONS:

### PARAMETERS

ABRACON P/N:	ATFC-0402
Operating temperature:	-45°C to +85°C
Storage temperature:	+25 $\pm$ 3°C, 80% RH max

Part Number ATFC-0402- Inductance Code	L(nH)	Tolerance	Q, Min @ 500MHz	SRF Min (GHz)	R <sub>DC</sub> Max ( $\Omega$ )	I <sub>DC</sub> Max (mA)
ATFC-0402-0N2	0.2	B, C, S	13	14	0.10	800
ATFC-0402-0N3	0.3	B, C, S	13	14	0.10	800
ATFC-0402-0N4	0.4	B, C, S	13	14	0.10	800
ATFC-0402-0N5	0.5	B, C, S	13	14	0.15	700
ATFC-0402-0N6	0.6	B, C, S	13	14	0.15	700
ATFC-0402-0N8	0.8	B, C, S	13	14	0.15	700
ATFC-0402-0N9	0.9	B, C, S	13	14	0.15	700
ATFC-0402-1N0	1.0	B, C, S	13	12	0.15	700
ATFC-0402-1N1	1.1	B, C, S	13	12	0.15	700
ATFC-0402-1N2	1.2	B, C, S	13	12	0.15	700
ATFC-0402-1N3	1.3	B, C, S	13	10	0.25	700
ATFC-0402-1N4	1.4	B, C, S	13	10	0.25	700
ATFC-0402-1N5	1.5	B, C, S	13	10	0.25	700
ATFC-0402-1N6	1.6	B, C, S	13	10	0.25	560
ATFC-0402-1N7	1.7	B, C, S	13	10	0.25	560
ATFC-0402-1N8	1.8	B, C, S	13	10	0.25	560
ATFC-0402-1N9	1.9	B, C, S	13	8	0.35	560
ATFC-0402-2N0	2.0	B, C, S	13	8	0.35	560
ATFC-0402-2N1	2.1	B, C, S	13	8	0.35	440
ATFC-0402-2N2	2.2	B, C, S	13	8	0.35	440
ATFC-0402-2N3	2.3	B, C, S	13	8	0.35	440
ATFC-0402-2N4	2.4	B, C, S	13	8	0.35	440
ATFC-0402-2N5	2.5	B, C, S	13	8	0.35	440
ATFC-0402-2N6	2.6	B, C, S	13	8	0.35	440
ATFC-0402-2N7	2.7	B, C, S	13	8	0.35	440
ATFC-0402-2N8	2.8	B, C, S	13	6	0.45	380
ATFC-0402-2N9	2.9	B, C, S	13	6	0.45	380
ATFC-0402-3N0	3.0	B, C, S	13	6	0.45	380
ATFC-0402-3N1	3.1	B, C, S	13	6	0.45	380
ATFC-0402-3N2	3.2	B, C, S	13	6	0.45	380
ATFC-0402-3N3	3.3	B, C, S	13	6	0.45	380
ATFC-0402-3N4	3.4	B, C, S	13	6	0.55	380
ATFC-0402-3N5	3.5	B, C, S	13	6	0.55	380
ATFC-0402-3N6	3.6	B, C, S	13	6	0.55	380
ATFC-0402-3N7	3.7	B, C, S	13	6	0.55	340
ATFC-0402-3N8	3.8	B, C, S	13	6	0.55	340
ATFC-0402-3N9	3.9	B, C, S	13	6	0.55	340
ATFC-0402-4N3	4.3	B, C, S	13	6	0.65	320
ATFC-0402-4N7	4.7	B, C, S	13	6	0.65	320
ATFC-0402-5N4	5.4	B, C, S	13	6	0.85	280
ATFC-0402-5N6	5.6	B, C, S	13	6	0.85	280
ATFC-0402-5N9	5.9	B, C, S	13	6	0.85	280
ATFC-0402-6N5	6.5	B, C, S	13	6	1.05	260
ATFC-0402-6N8	6.8	B, C, S	13	6	1.05	260

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# THIN FILM CHIP INDUCTORS



0.60 x 0.30 x 0.23mm

ATFC-0402

RoHS/RoHS II Compliant

## Key Electrical Specifications (Con'd)

Part Number ATFC-0402- Inductance Code	L(nH)	Tolerance	Q, Min @ 500MHz	SRF Min (GHz)	RDC Max ( $\Omega$ )	IDC Max (mA)
ATFC-0402-7N2	7.2	B, C, S	13	6	1.05	260
ATFC-0402-8N0	8.0	B, C, S	13	5.5	1.25	220
ATFC-0402-8N1	8.1	B, C, S	13	5.5	1.25	220
ATFC-0402-8N2	8.2	B, C, S	13	5.5	1.25	220
ATFC-0402-9N1	9.1	B, C, S	13	5.5	1.25	220
ATFC-0402-10N	10.0	F, G, H, J	13	4.5	1.35	200
ATFC-0402-10N8	10.8	F, G, H, J	13	4.5	1.35	200
ATFC-0402-12N	12.0	F, G, H, J	13	3.7	1.55	180
ATFC-0402-13N8	13.8	F, G, H, J	13	3.7	1.75	180
ATFC-0402-15N	15.0	F, G, H, J	13	3.3	1.75	130
ATFC-0402-17N	17.0	F, G, H, J	13	3.1	1.95	100
ATFC-0402-18N	18.0	F, G, H, J	13	3.1	2.15	100
ATFC-0402-20N8	20.8	F, G, H, J	13	2.8	2.55	90
ATFC-0402-22N	22.0	F, G, H, J	13	2.8	2.65	90
ATFC-0402-27N	27.0	F, G, H, J	13	2.5	3.25	75
ATFC-0402-33N	33.0	J	13	2.5	4.50	75

## Test Conditions and Equipments

Inductance (L)

- Test equipment: Agilent4287A+Agilent16196C
- Test frequency: 500MHz

## PART IDENTIFICATION:

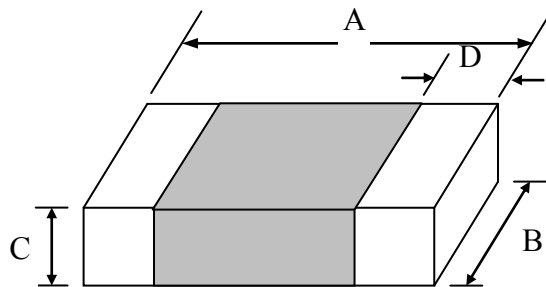
ATFC- 0402-   -

**Inductance Code**  
Please refer to the table above

Inductance Tolerance
B: $\pm 0.1\text{nH}$
C: $\pm 0.2\text{nH}$
S: $\pm 0.3\text{nH}$
F: $\pm 1\%$
G: $\pm 2\%$
H: $\pm 3\%$
J: $\pm 5\%$

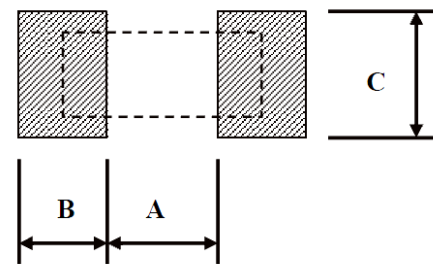
**Packaging**  
T: Tape and Reel  
(10kpcs reel)

## OUTLINE DIMENSIONS:



A	B	C	D
1.0 $\pm$ 0.05	0.5 $\pm$ 0.05	0.32 $\pm$ 0.05	0.20 $\pm$ 0.10

## Recommended Land Pattern



A	B	C
0.50	0.45	0.60 $\pm$ 0.2

Dimension: mm

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Revised: 06.17.13

# THIN FILM CHIP INDUCTORS

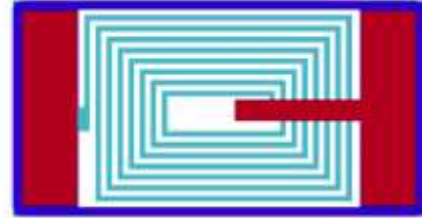
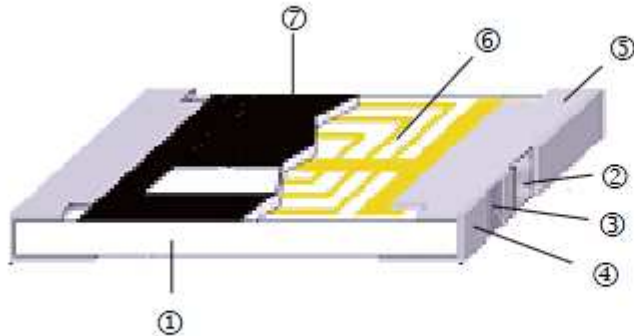


0.60 x 0.30 x 0.23mm

ATFC-0402

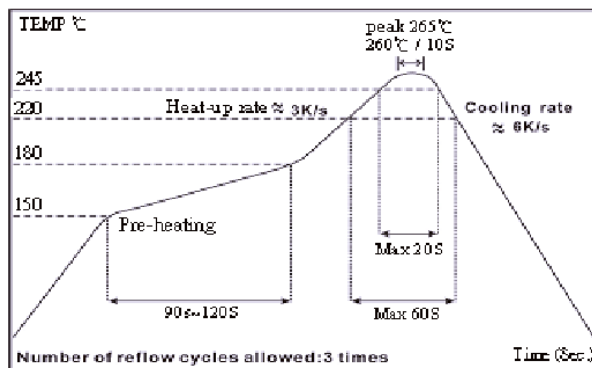
RoHS/RoHS II Compliant

## MATERIALS:



No.	Material
1	Alumina Substrate
2	Inner Electrode (Ni-Cr)
3	Barrier Layer (Ni)
4	External Electrode (Sn)
5	Edge Electrode
6	Cu Circuits
7	Overcoat

## REFLOW PROFILE:



# THIN FILM CHIP INDUCTORS



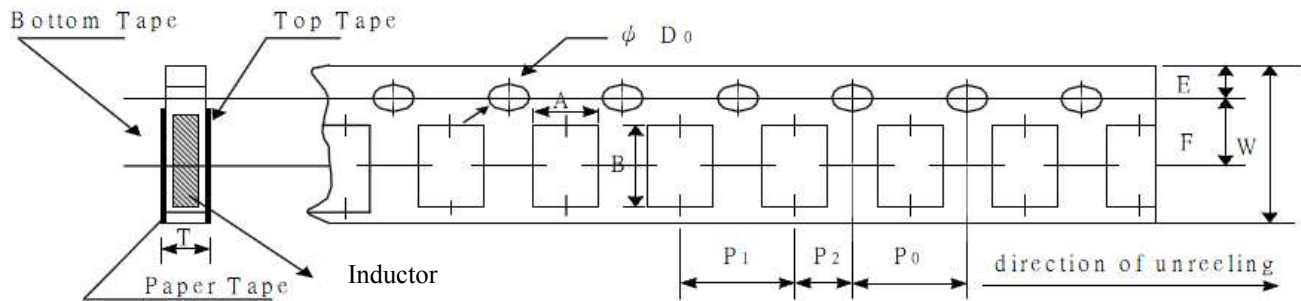
0.60 x 0.30 x 0.23mm

ATFC-0402

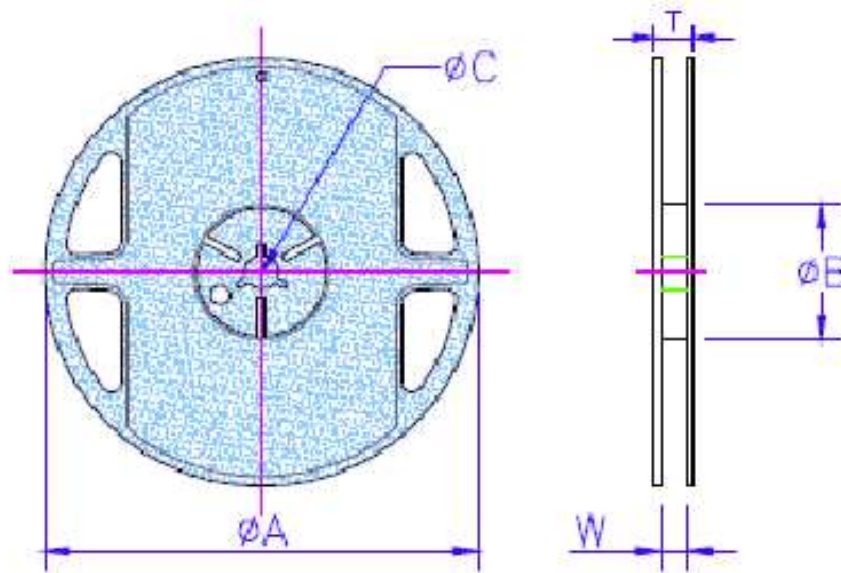
RoHS/RoHS II Compliant

## TAPE & REEL:

T= tape and reel (10,000pc/reel)



A	B	W	E	F	P0	P1	P2	ΦD0	T
0.70±0.05	1.16±0.05	8.00±0.10	1.75±0.05	3.50±0.05	4.00±0.10	2.00±0.05	2.00±0.05	1.55±0.05	0.40±0.03



ΦA	ΦB	ΦC	W	T
178.0±1.0	60.0±1.0	13.5±0.7	9.5±1.0	11.5±1.0

Dimension: mm

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