

# THIN FILM CHIP INDUCTOR

ATFC-0603



**RoHS**  
Compliant



1.6 x 0.8 x 0.45mm

## FEATURES:

- A photo-lithographic single layer ceramic chip
- High SRF; Excellent Q
- Superior Temperature Stability
- Tight Tolerance of  $\pm 1\%$  or  $\pm 0.1\text{nH}$
- Self Resonant Frequency Controlled within 10%
- Stable Inductance in High Frequency Circuit
- Highly Stable Design for Critical Needs

## APPLICATIONS:

- Cellular Telephones
- Pagers and GPS Products
- Wireless LAN
- Communication Appliances
- Bluetooth Module
- VCO, TCXO Circuit and RF Transceiver Modules

## STANDARD SPECIFICATIONS:

PARAMETERS	
ABRACON P/N:	ATFC-0603-xxx Series
Operating temperature:	-25°C to + 85°C
Storage temperature:	25 $\pm$ 3; Humidity <80%RH

ABRACON p/n	Inductance (nH)	Standard Tolerance (% or nH)	Quality Factor (Q) min	Resistance DC/Max (Ohm)	Current DC/Max (mA)	Self Resonant Frequency /min (GHz)
ATFC-0603-1N0	1.0	$\pm 0.1\text{nH}$	15 / 300MHz	0.35	800	13
ATFC-0603-1N2	1.2	$\pm 0.1\text{nH}$	15 / 300MHz	0.35	800	13
ATFC-0603-1N5	1.5	$\pm 0.1\text{nH}$	15 / 300MHz	0.35	800	10
ATFC-0603-1N8	1.8	$\pm 0.1\text{nH}$	15 / 300MHz	0.35	300	10
ATFC-0603-2N2	2.2	$\pm 0.1\text{nH}$	15 / 300MHz	0.35	300	8
ATFC-0603-2N7	2.7	$\pm 0.1\text{nH}$	15 / 300MHz	0.45	300	6
ATFC-0603-3N3	3.3	$\pm 0.1\text{nH}$	15 / 300MHz	0.45	300	6
ATFC-0603-3N9	3.9	$\pm 0.1\text{nH}$	15 / 300MHz	0.45	300	6
ATFC-0603-4N7	4.7	$\pm 0.1\text{nH}$	15 / 300MHz	0.55	300	5
ATFC-0603-5N6	5.6	$\pm 0.1\text{nH}$	15 / 300MHz	0.65	300	5
ATFC-0603-6N8	6.8	$\pm 0.1\text{nH}$	15 / 300MHz	0.75	300	5
ATFC-0603-8N2	8.2	$\pm 0.1\text{nH}$	15 / 300MHz	0.95	300	4
ATFC-0603-10N	10	1%	15 / 300MHz	0.95	300	4
ATFC-0603-12N	12	1%	15 / 300MHz	1.05	300	3
ATFC-0603-15N	15	1%	15 / 300MHz	1.35	300	3
ATFC-0603-18N	18	1%	15 / 300MHz	1.65	300	2
ATFC-0603-22N	22	1%	15 / 300MHz	1.95	250	2
ATFC-0603-27N	27	1%	15 / 300MHz	2.35	250	2
ATFC-0603-33N	33	1%	15 / 300MHz	2.75	250	1.5
ATFC-0603-39N	39	1%	15 / 300MHz	3.00	200	1.5
ATFC-0603-47N	47	1%	15 / 300MHz	3.00	200	1.5
ATFC-0603-56N	56	1%	15 / 300MHz	5.00	150	1
ATFC-0603-68N	68	1%	15 / 300MHz	5.00	150	1
ATFC-0603-R10	100	2%	15 / 300MHz	7.50	100	1

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## OPTIONS AND PART IDENTIFICATION:

(Left blank if standard)

ATFC - 0603 -  -  -

### Inductance Code

Please refer to the Table above.

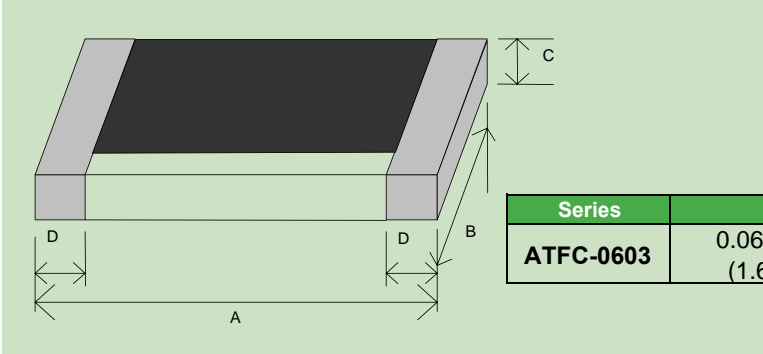
### Packaging

T	Tape & Reel
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### Inductance Tolerance

J	±5%
H	±3%
G	±2%
F	±1%
S	±0.3 nH
C	±0.2 nH
B	±0.1 nH

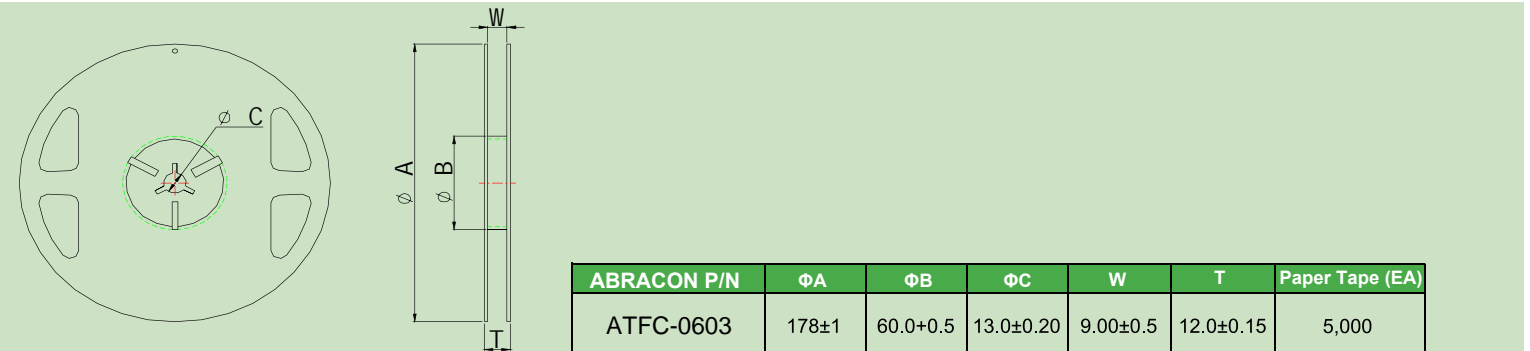
## OUTLINE DRAWING:



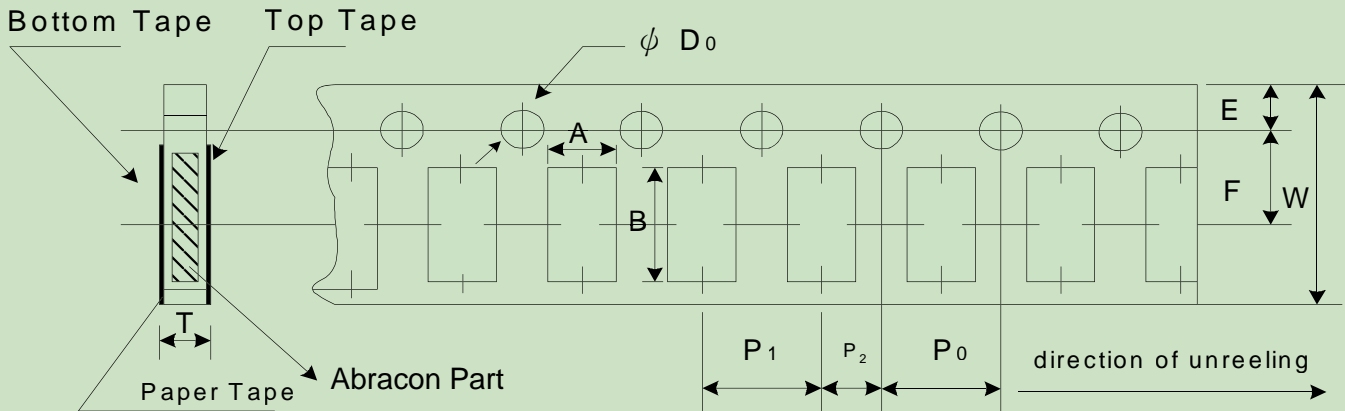
Series	A	B	C	D
ATFC-0603	0.063±0.004 (1.6±0.10)	0.031±0.004 (0.8±0.10)	0.018±0.004 (0.45±0.10)	0.012±0.008 (0.3±0.20)

Dimensions: Inches  
(mm)

## TAPE & REEL:



ABRACON P/N	ΦA	ΦB	ΦC	W	T	Paper Tape (EA)
ATFC-0603	178±1	60.0±0.5	13.0±0.20	9.00±0.5	12.0±0.15	5,000



Codes	A	B	W	E	F
ATFC-0603	1.10±0.05	1.90±0.05	8.00±0.10	1.75±0.05	3.5±0.05

Codes	P <sub>0</sub>	P <sub>1</sub>	P <sub>2</sub>	ΦD <sub>0</sub>	T
ATFC-0603	4.00±0.10	4.00±0.10	2.00±0.05	1.55±0.05	0.60±0.03

Dimensions: mm

ABRACON IS  
ISO 9001 / QS 9000  
CERTIFIED



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