



**THE DATASHEET OF  
ATFC-0402HQ-1N8B-T**

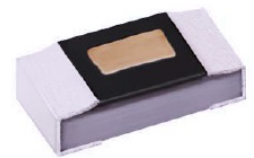


# HIGH Q THIN FILM CHIP INDUCTORS

ATFC-0402HQ



RoHS/RoHS II



1.0 x 0.5 x 0.32 mm

## 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-0402HQ
Operating temperature :	-40°C to +85°C
Storage temperature:	25 $\pm$ 3°C; Humidity <80%RH in Tape & Reel.

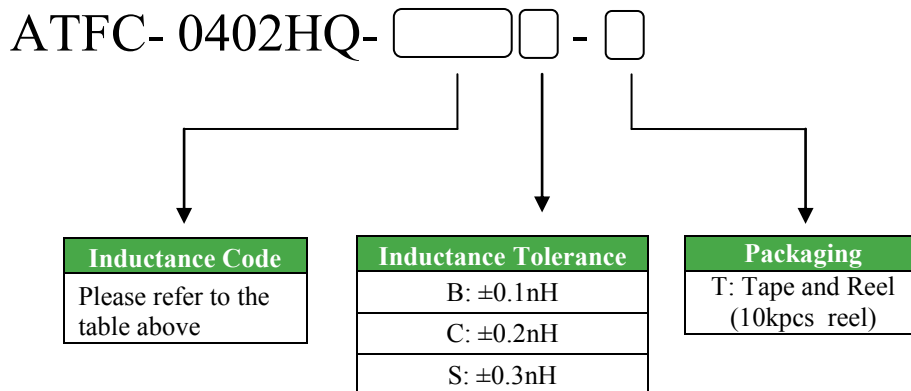
Part Number ATFC-0402HQ- Inductance Code	L(nH)	Tolerance	Q, Min @ 500MHz	SRF Min (GHz)	R <sub>DC</sub> Max (Ω)	I <sub>DC</sub> Max (mA)
ATFC-0402HQ-1N3	1.3	B, C, S	16	7	0.12	730
ATFC-0402HQ-1N5	1.5	B, C, S	16	7	0.14	730
ATFC-0402HQ-1N8	1.8	B, C, S	16	7	0.14	650
ATFC-0402HQ-3N1	3.1	B, C, S	16	7	0.20	500
ATFC-0402HQ-3N9	3.9	B, C, S	16	7	0.20	500
ATFC-0402HQ-4N7	4.7	B, C, S	16	7	0.50	330

## Test Conditions and Equipments

### Inductance (L)

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

## PART IDENTIFICATION:

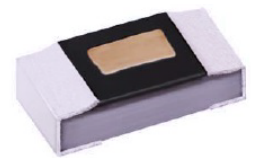


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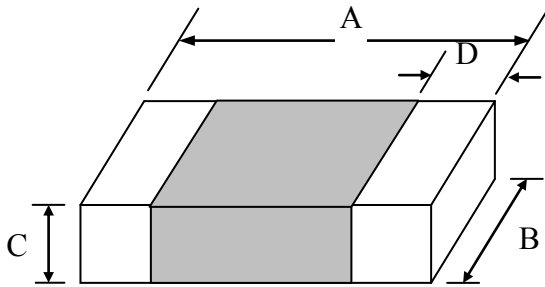


RoHS/RoHS II



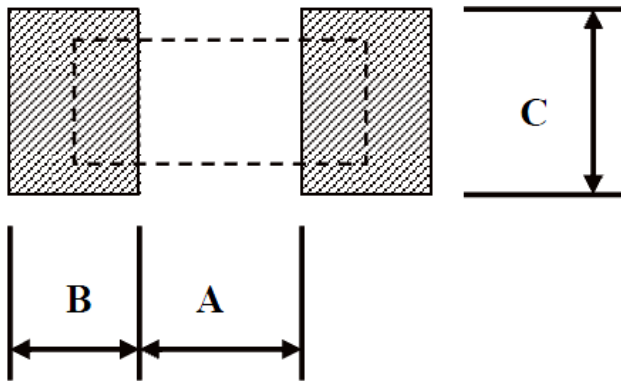
1.0 x 0.5 x 0.32 mm

## OUTLINE DIMENSIONS:



A	B	C	D
1.0±0.05	0.5±0.05	0.32±0.05	0.20±0.10

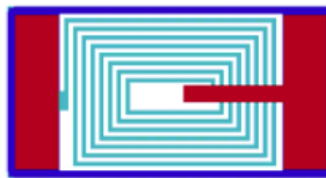
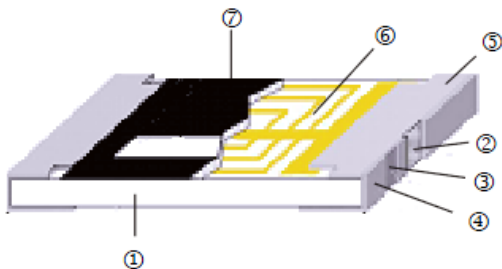
### Recommended Land Pattern



A	B	C
0.50	0.45	0.60±0.2

Dimension: mm

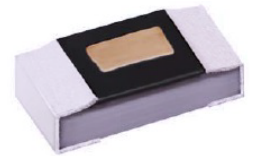
### Materials



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

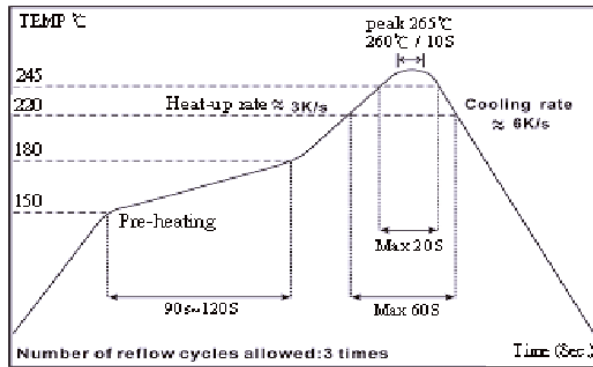
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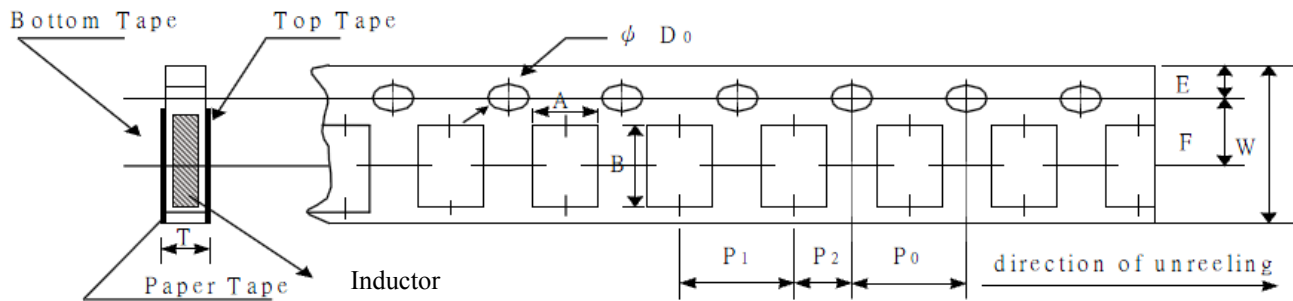
1.0 x 0.5 x 0.32 mm

## REFLOW PROFILE:

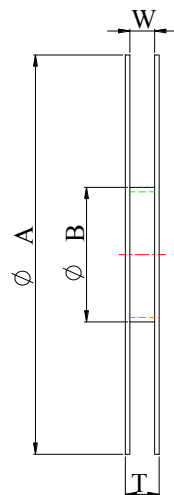
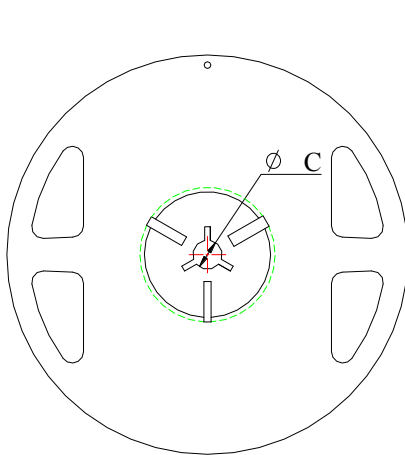


## TAPE & REEL:

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



A	B	W	E	F	P <sub>0</sub>	P <sub>1</sub>	P <sub>2</sub>	$\Phi D_0$	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



$\Phi A$	$\Phi B$	$\Phi C$	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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