

# UNSHIELDED SMD POWER INDUCTOR

AISC-1812H



4.5 x 3.2 x 2.6mm



**RoHS**  
Compliant

## FEATURES:

- Excellent solderability and resistance
- Suitable for flow and reflow soldering
- Packed in embossed carrier tape and can be used by automatic mounting machines

## STANDARD SPECIFICATIONS:

### PARAMETERS

ABRACON P/N:	AISC-1812H-xxx Series
Operating temperature:	-25°C to + 85°C
Storage temperature:	-25°C to + 85°C, 70% RH max.

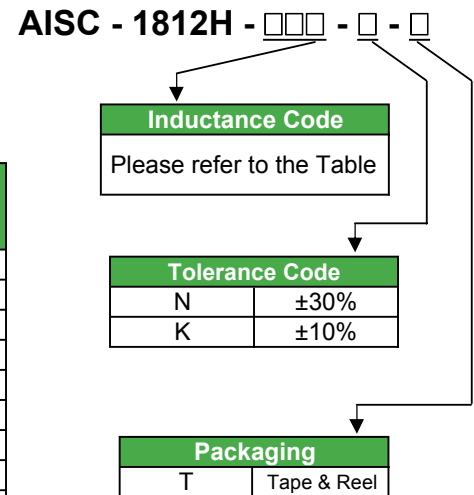
Part Number	Test Condition (V/Hz)	L (μH)	DC Resistance (Ω) Max.	SRF (MHz) Min	I <sub>r</sub> (A) Max
AISC-1812H-1R0N	1.0 / 1.0M	1.0	0.08	120	1.08
AISC-1812H-1R5N	1.0 / 1.0M	1.5	0.09	85	1.00
AISC-1812H-1R8N	1.0 / 1.0M	1.8	0.10	45	0.96
AISC-1812H-2R2N	1.0 / 1.0M	2.2	0.11	62	0.90
AISC-1812H-2R7N	1.0 / 1.0M	2.7	0.12	53	0.87
AISC-1812H-3R3N	1.0 / 1.0M	3.3	0.13	47	0.80
AISC-1812H-3R9N	1.0 / 1.0M	3.9	0.15	41	0.78
AISC-1812H-4R7N	1.0 / 1.0M	4.7	0.20	38	0.75
AISC-1812H-5R6N	1.0 / 1.0M	5.6	0.23	33	0.73
AISC-1812H-6R8N	1.0 / 1.0M	6.8	0.25	31	0.72
AISC-1812H-8R2N	1.0 / 1.0M	8.2	0.27	27	0.68
AISC-1812H-100K	1.0 / 1.0M	10	0.35	23	0.65
AISC-1812H-120K	1.0 / 1.0M	12	0.47	21	0.62
AISC-1812H-150K	1.0 / 1.0M	15	0.54	19	0.57
AISC-1812H-180K	1.0 / 1.0M	18	0.56	17	0.48
AISC-1812H-220K	1.0 / 1.0M	22	0.64	15	0.42
AISC-1812H-270K	1.0 / 100K	27	0.75	14	0.37
AISC-1812H-330K	1.0 / 100K	33	0.86	12	0.31
AISC-1812H-390K	1.0 / 100K	39	1.18	11	0.30
AISC-1812H-470K	1.0 / 100K	47	1.38	10	0.28
AISC-1812H-560K	1.0 / 100K	56	1.56	9.3	0.25
AISC-1812H-680K	1.0 / 100K	68	1.92	8.4	0.22
AISC-1812H-820K	1.0 / 100K	82	2.08	7.5	0.20
AISC-1812H-101K	1.0 / 100K	100	2.96	6.8	0.19
AISC-1812H-121K	1.0 / 100K	120	3.20	6.2	0.17
AISC-1812H-151K	1.0 / 100K	150	3.72	5.5	0.13
AISC-1812H-181K	1.0 / 100K	180	5.16	5	0.12
AISC-1812H-221K	1.0 / 100K	220	5.90	4.5	0.11
AISC-1812H-271K	1.0 / 100K	270	6.55	4	0.11
AISC-1812H-331K	1.0 / 100K	330	7.75	3.6	0.10
AISC-1812H-391K	1.0 / 100K	390	8.06	3.3	0.10
AISC-1812H-471K	1.0 / 1.0K	470	12.50	3	0.09
AISC-1812H-561K	1.0 / 1.0K	560	13.00	2.7	0.07
AISC-1812H-681K	1.0 / 1.0K	680	14.60	2.5	0.07
AISC-1812H-821K	1.0 / 1.0K	820	16.80	2.2	0.06
AISC-1812H-102K	1.0 / 1.0K	1000	26.40	2	0.05
AISC-1812H-122K	1.0 / 1.0K	1200	48.00	1.8	0.05
AISC-1812H-152K	1.0 / 1.0K	1500	52.20	1.6	0.04
AISC-1812H-182K	1.0 / 1.0K	1800	58.80	1.5	0.04
AISC-1812H-222K	1.0 / 1.0K	2200	65.00	1.3	0.03

## APPLICATIONS:

- Excellent for power line DC/DC conversion application
- Used in hard disk, notebook computer and other electronic equipment

## OPTIONS & PART IDENTIFICATION:

(Left blank if standard)



I<sub>r</sub>: Rated current that will cause initial inductance value approximately 10% rolloff or temperature rise approximate 40°C without core loss, whichever is lower.

ABRACON IS  
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CERTIFIED



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AISC-1812H

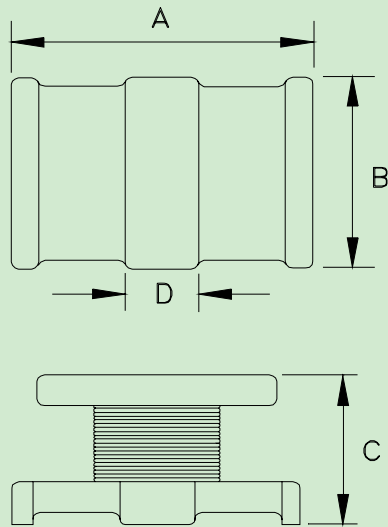


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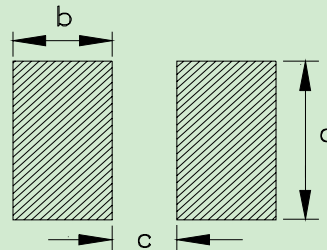


4.5 x 3.2 x 2.6mm

## OUTLINE DRAWING:



Recommended Land Pattern

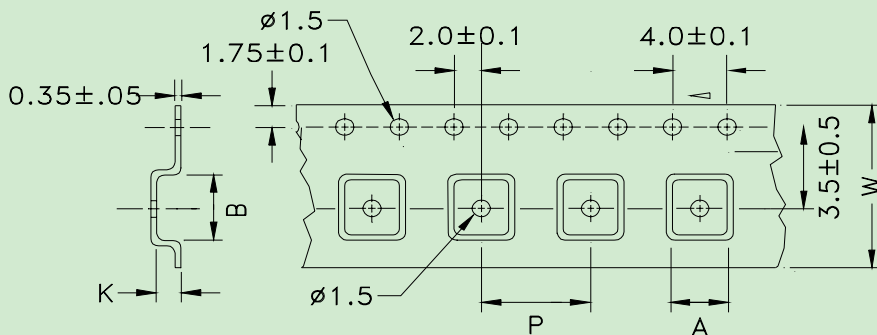


Dimensions: Inches (mm)

Series	A	B	C	D(ref)	a(ref)	b(ref)	c(ref)
AISC-1812H	0.177±0.012 (4.5 ±0.3)	0.126±0.012 (3.2 ±0.3)	0.102±0.012 (2.6 ±0.3)	0.079 (2.0)	0.039 (3.0)	0.118 (1.6)	0.039 (1.0)

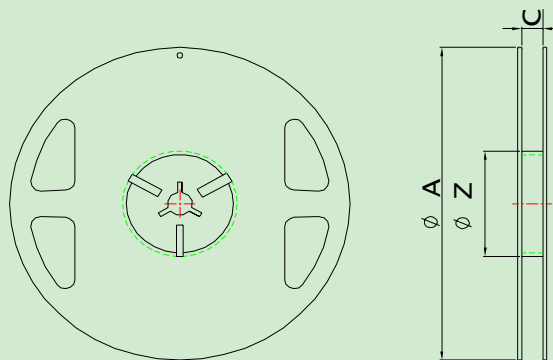
## TAPE & REEL: Tape and reel 500 pcs/reel

### Dimensions of Tape



ABRACON P/N	A (mm)	B (mm)	K (mm)	P (mm)	T (mm)	W (mm)	PCS/REEL
AISC-1812H	3.8 ± 0.1	4.8 ± 0.1	2.95 ± 0.1	8.0 ± 0.1	0.35 ± 0.05	12.0 ± 0.3	500

### Dimensions of Reel



series	A	C	Z
ASPI-1812H	178.0±2.0	12.4	60±1.0

Dimensions: mm

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