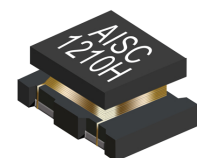


# UNSHIELDED SMD POWER INDUCTOR

## AISC-1210H



**RoHS**  
Compliant



3.5 x 2.5 x 2.5mm

### FEATURES:

- Low DC resistance permits high current flow
- Exhibit low voltage drops and inductance variations with respect to temperature rise and DC current level
- Excellent solder heat resistance allows both flow and reflow soldering methods
- Excellent mechanical reliability suitable for automotive, safety application

### APPLICATIONS:

- Excellent for power line DC/DC conversion applications
- Used in video, communications, notebook computer and other electronic equipment

### STANDARD SPECIFICATIONS:

#### PARAMETERS

ABRACON P/N:	AISC-1210H-xxx Series
Operating temperature:	-25°C to + 85°C
Storage temperature:	-25°C to + 85°C, 70% RH max.

Abrakon Part Number	Inductance L (μH)	Test Frequency	SRF (MHz) Min	Rdc(m Ω) Max	Rated DC Current (A)
AISC-1210H-R15 N	0.15	1.0 MHz	400	21	4.40
AISC-1210H-R27 N	0.27	1.0 MHz	250	22	4.00
AISC-1210H-R39 N	0.39	1.0 MHz	200	33	3.10
AISC-1210H-R56 N	0.56	1.0 MHz	180	50	2.90
AISC-1210H-R82 N	0.82	1.0 MHz	150	53	2.60
AISC-1210H-1R0 N	1.0	1.0 MHz	100	63	2.30
AISC-1210H-1R2 N	1.2	1.0 MHz	90	92	2.10
AISC-1210H-1R5 N	1.5	1.0 MHz	80	100	1.70
AISC-1210H-1R8 N	1.8	1.0 MHz	72	110	1.50
AISC-1210H-2R2 N	2.2	1.0 MHz	64	124	1.30
AISC-1210H-2R4 N	2.4	1.0 MHz	62	130	1.30
AISC-1210H-2R7 N	2.7	1.0 MHz	60	132	1.20
AISC-1210H-3R3 N	3.3	1.0 MHz	53	167	1.15
AISC-1210H-3R9 N	3.9	1.0 MHz	45	222	1.00
AISC-1210H-4R7 N	4.7	1.0 MHz	43	247	0.90
AISC-1210H-5R6 N	5.6	1.0 MHz	38	359	0.78
AISC-1210H-6R8 N	6.8	1.0 MHz	32	392	0.75
AISC-1210H-8R2 N	8.2	1.0 MHz	30	450	0.70
AISC-1210H-100 K	10.0	1.0 MHz	26	509	0.65
AISC-1210H-120 K	12.0	1.0 MHz	26	674	0.61
AISC-1210H-150 K	15.0	1.0 MHz	26	760	0.55
AISC-1210H-180 K	18.0	1.0 MHz	20	978	0.45
AISC-1210H-220 K	22.0	100 KHz	19	1000	0.43
AISC-1210H-270 K	27.0	100 KHz	18	1240	0.38
AISC-1210H-330 K	33.0	100 KHz	17	1940	0.35
AISC-1210H-390 K	39.0	100 KHz	16	2000	0.33
AISC-1210H-470 K	47.0	100 KHz	15	3200	0.30
AISC-1210H-560 K	56.0	100 KHz	13	3640	0.25
AISC-1210H-680 K	68.0	100 KHz	12	4060	0.21
AISC-1210H-820 K	82.0	100 KHz	12	4580	0.20
AISC-1210H-101 K	100.0	100 KHz	10	6880	0.18
AISC-1210H-121 K	120.0	100 KHz	8	7470	0.16
AISC-1210H-151 K	150.0	100 KHz	7	8320	0.14
AISC-1210H-181 K	180.0	100 KHz	7	13160	0.12
AISC-1210H-221 K	220.0	100 KHz	6.8	14400	0.10
AISC-1210H-271 K	270.0	100 KHz	6	15000	0.08
AISC-1210H-331 K	330.0	100 KHz	5.6	18900	0.06
AISC-1210H-391 K	390.0	1 KHz	5	20400	0.06
AISC-1210H-471 K	470.0	1 KHz	4	27500	0.06
AISC-1210H-561 K	560.0	1 KHz	4	29800	0.05
AISC-1210H-681 K	680.0	1 KHz	3.2	40000	0.04

Inductance tolerance: N: ± 30%; K: ±10%

ABRACON IS  
ISO 9001:2008  
CERTIFIED



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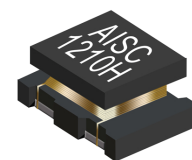
Revised: 10.20.11

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AISC-1210H



RoHS  
Compliant



3.5 x 2.5 x 2.5mm

## PART IDENTIFICATION

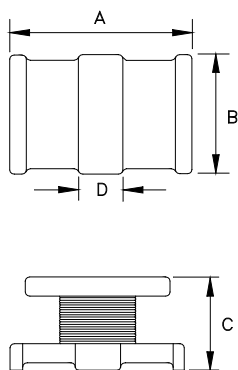
AISC - 1210H - □□□ - □

**Inductance Code**  
Please refer to the Table

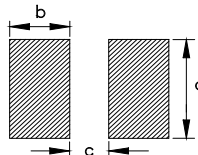
**Tolerance Code**  
Please refer to the Table

**Packaging**  
T      Tape & Reel

## OUTLINE DIMENSIONS:



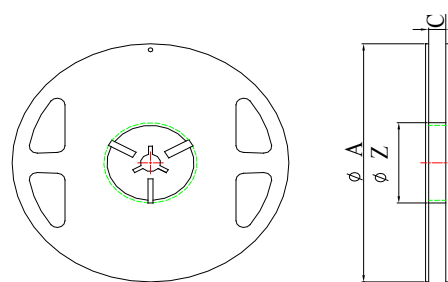
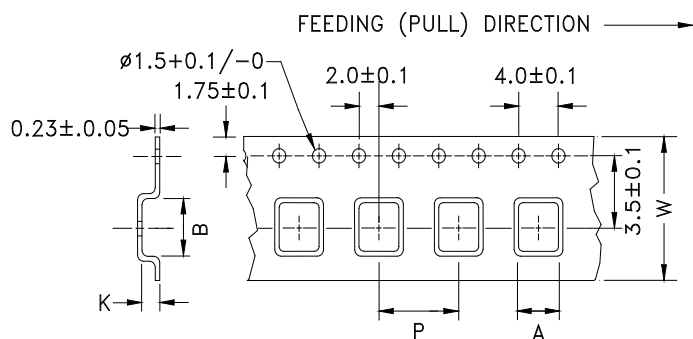
Recommended Land Pattern



Series	A	B	C	D	a(ref)	b(ref)	c(ref)
AISC-1210H	0.138 max (3.5 max)	0.098±0.008 (2.5 ±0.2)	0.098 max (2.5 max)	0.051 ±0.012 (1.3±0.3)	0.118 (3.0)	0.051 (1.3)	0.039 (1.0)

Dimensions: inch (mm)

## TAPE & REEL: T= tape and reel (1500pcs/reel)



ABRACON P/N	A (mm)	B (mm)	K (mm)	P (mm)	W (mm)	PCS/REEL
AISC-1210H	2.84 ± 0.1	3.71 ± 0.1	2.57 ± 0.1	4.0 ± 0.1	8.0 ± 0.1	1500

Series	A	C	Z
AISC-1210H	178	8.0±0.5	60±0.5

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Revised: 10.20.11