

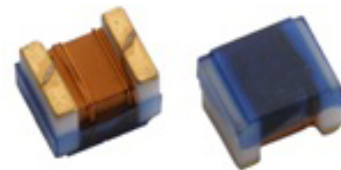
# Wire Wound Inductors (Ferrite Base)

AISC-1210HS

MSL level: 2 (This part is packed with dry packaging)



RoHS  
Compliant



3.20 x 3.05 x 1.30 mm

## FEATURES:

- Excellent solderability and resistance soldering heat.
- Suitable for RoHS compliant reflow.
- High reliability and suitable for surface mount assembly.
- Wide range of inductance value are available.
- Small in tolerance from  $\pm 10\%$ .

## APPLICATIONS:

- Notebooks, PC's,
- Cellular phone backlight, Inverter and etc.

## ELECTRICAL SPECIFICATIONS:

### PARAMETERS

|                        |                               |
|------------------------|-------------------------------|
| ABRACON P/N:           | AISC-01210HS Series           |
| Operating temperature: | -40°C to +85°C                |
| Storage temperature:   | -10°C to +40°C, 20% to 70% RH |

| Abracon Part Number | L ( $\mu$ H) | Tolerance (K. M) | Q Min | L, Q Test Freq (kHz/MHz) | SRF Min (MHz) | DCR Max ( $\Omega$ ) | I <sub>SAT</sub> Max (mA) | I <sub>DC</sub> Max (mA) |
|---------------------|--------------|------------------|-------|--------------------------|---------------|----------------------|---------------------------|--------------------------|
| AISC-1210HS-2R2     | 2.2          | K. M             | 10    | 100 / 1                  | 150           | 0.5                  | 850                       | 800                      |
| AISC-1210HS-2R7     | 2.7          | K. M             | 10    | 100 / 1                  | 120           | 0.6                  | 750                       | 700                      |
| AISC-1210HS-3R3     | 3.3          | K. M             | 10    | 100 / 1                  | 100           | 0.75                 | 700                       | 650                      |
| AISC-1210HS-3R9     | 3.9          | K. M             | 10    | 100 / 1                  | 90            | 0.8                  | 650                       | 600                      |
| AISC-1210HS-4R7     | 4.7          | K. M             | 10    | 100 / 1                  | 80            | 0.95                 | 600                       | 550                      |
| AISC-1210HS-5R6     | 5.6          | K. M             | 10    | 100 / 1                  | 65            | 1                    | 550                       | 520                      |
| AISC-1210HS-6R8     | 6.8          | K. M             | 10    | 100 / 1                  | 55            | 1.1                  | 500                       | 480                      |
| AISC-1210HS-8R2     | 8.2          | K. M             | 10    | 100 / 1                  | 40            | 1.3                  | 480                       | 450                      |
| AISC-1210HS-100     | 10           | K. M             | 10    | 100 / 1                  | 36            | 1.5                  | 450                       | 430                      |
| AISC-1210HS-120     | 12           | K. M             | 10    | 100 / 1                  | 34            | 1.6                  | 420                       | 400                      |
| AISC-1210HS-150     | 15           | K. M             | 10    | 100 / 1                  | 32            | 1.9                  | 400                       | 350                      |
| AISC-1210HS-180     | 18           | K. M             | 10    | 100 / 1                  | 30            | 2.9                  | 350                       | 320                      |
| AISC-1210HS-220     | 22           | K. M             | 10    | 100 / 1                  | 30            | 3.5                  | 320                       | 300                      |
| AISC-1210HS-270     | 27           | K. M             | 10    | 100 / 1                  | 25            | 4.2                  | 280                       | 250                      |
| AISC-1210HS-330     | 33           | K. M             | 10    | 100 / 1                  | 20            | 5                    | 250                       | 220                      |

## Test Equipment:

1. Inductance is measured in HP-4284A precision LCR meter with SMD-A fixture.
2. Q factor is measured in HP-4284A precision LCR meter with SMD-A fixture.
3. SRF is measured in Agilent E-5071B Network Analyzer.
4. RDC is measured in HP-4338B milliohm meter.
5. I<sub>sat</sub>: Based on inductance change ( $\Delta L/L_0 : \leq -10\%$ )
6. I<sub>DC</sub>: Based on temperature rise ( $\Delta T : 25^\circ\text{C TYP.}$ )

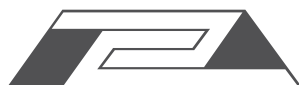
Unless otherwise specified, the standard range of atmospheric condition for making measurement and test are as follows:

Ambient Temperature : 25°C (20°C)  $\pm$  2°C

Relative Humidity : 60% to 70%

Air Pressure : 86Kpa to 106Kpa

ABRACON IS  
ISO 9001:2008  
CERTIFIED



**ABRACON**  
CORPORATION

Visit [www.abracon.com](http://www.abracon.com) for Terms & Conditions of Sale

30332 Esperanza, Rancho Santa Margarita, California 92688  
tel 949-546-8000 fax 949-546-8001 [www.abracon.com](http://www.abracon.com)

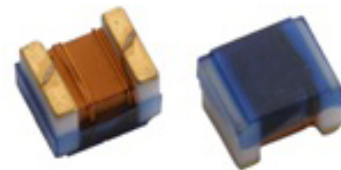
Revised: 12.08.11

# Wire Wound Inductors (Ferrite Base)

AISC-1210HS



RoHS  
Compliant

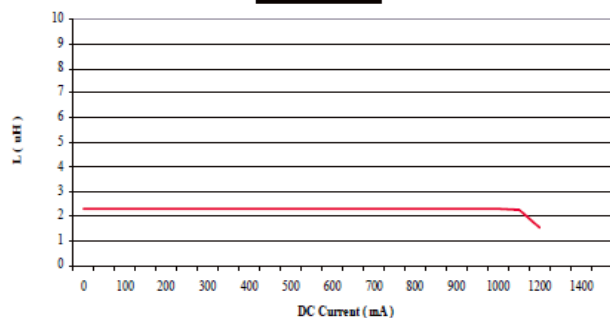


3.20 x 3.05 x 1.30 mm

## ELECTRICAL CHARACTERISTICS

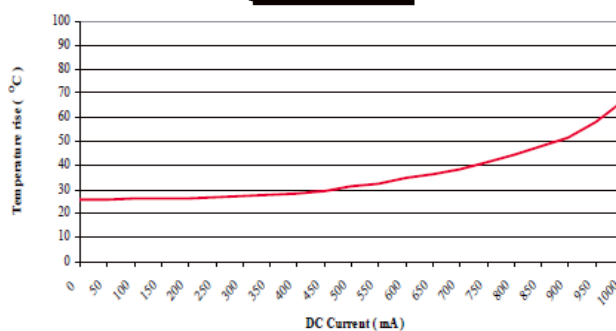
AISC-1210HS-2R2K

L Vs Isat Chart



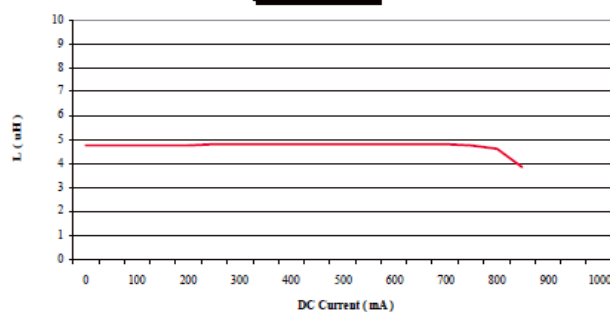
AISC-1210HS-2R2K

Idc Vs Temperature



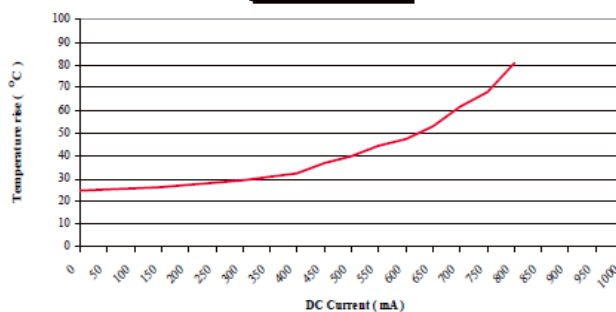
AISC-1210HS-4R7K

L Vs Isat Chart



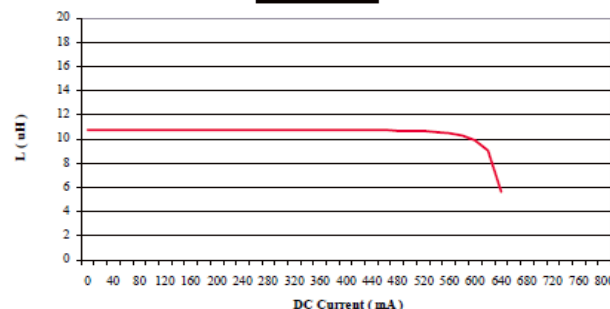
AISC-1210HS-4R7K

Idc Vs Temperature



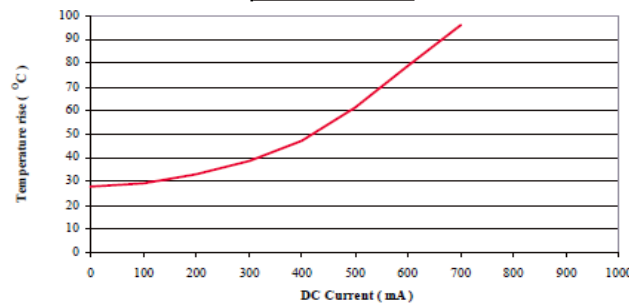
AISC-1210HS-100K

L Vs Isat Chart



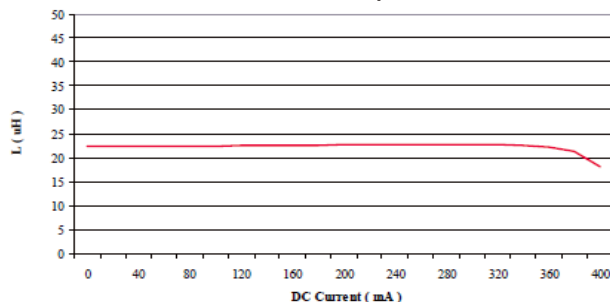
AISC-1210HS-100K

Idc Vs Temperature



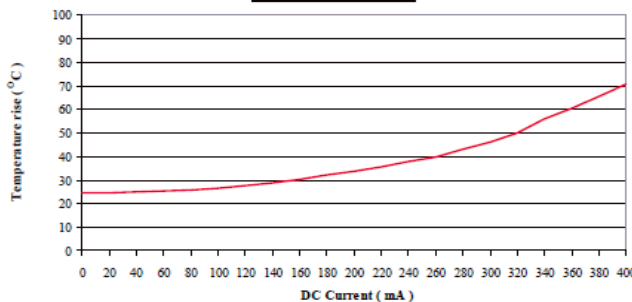
AISC-1210HS-220K

L Vs Isat Chart



AISC-1210HS-220K

Idc Vs Temperature

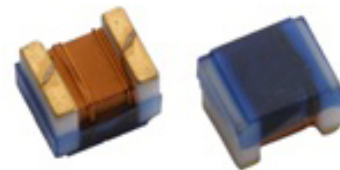


# Wire Wound Inductors (Ferrite Base)

AISC-1210HS



**RoHS**  
Compliant



3.20 x 3.05 x 1.30 mm

## PART NUMBER IDENTIFICATION

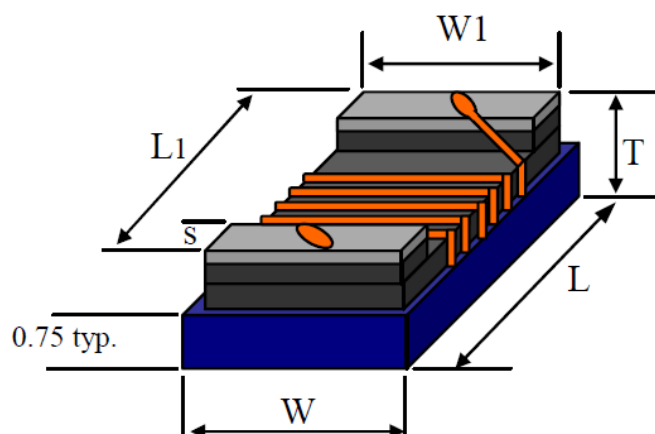
AISC-1210HS-  - 

| Inductance Code           |
|---------------------------|
| Please refer to the table |

| Tolerance Code |
|----------------|
| K: $\pm 10\%$  |
| M: $\pm 20\%$  |

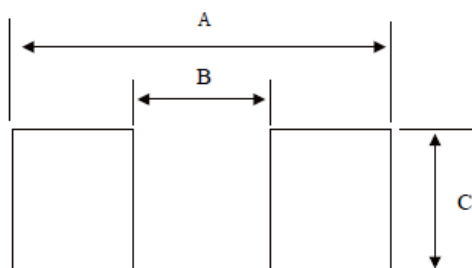
| Packaging                     |
|-------------------------------|
| T2: Tape & Reel (2k pcs/Reel) |

## OUTLINE DIMENSIONS



| L                                      | L1                                    | W                                      | W1                                     | T                         | s                                     |
|----------------------------------------|---------------------------------------|----------------------------------------|----------------------------------------|---------------------------|---------------------------------------|
| 3.20 $\pm$ 0.30<br>[0.126 $\pm$ 0.012] | 3.05 $\pm$ 0.10<br>[0.12 $\pm$ 0.004] | 2.50 $\pm$ 0.30<br>[0.098 $\pm$ 0.012] | 2.40 $\pm$ 0.10<br>[0.094 $\pm$ 0.004] | 1.30 Max.<br>[0.051 Max.] | 0.50 $\pm$ 0.10<br>[0.02 $\pm$ 0.004] |

## Recommended Land Pattern



| A    | B    | C    |
|------|------|------|
| 4.00 | 1.70 | 2.82 |

Dimension: mm [inch]

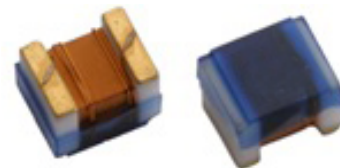


# Wire Wound Inductors (Ferrite Base)

AISC-1210HS

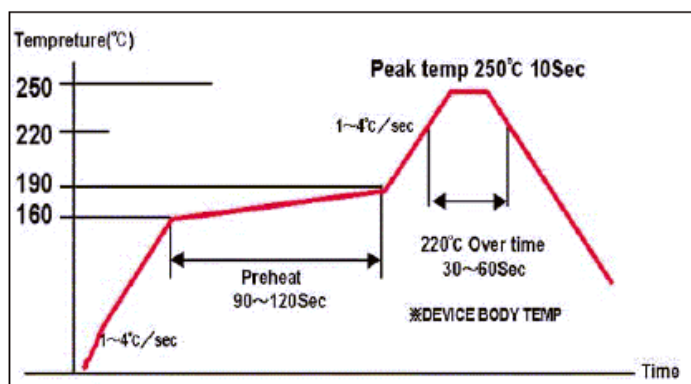


RoHS  
Compliant

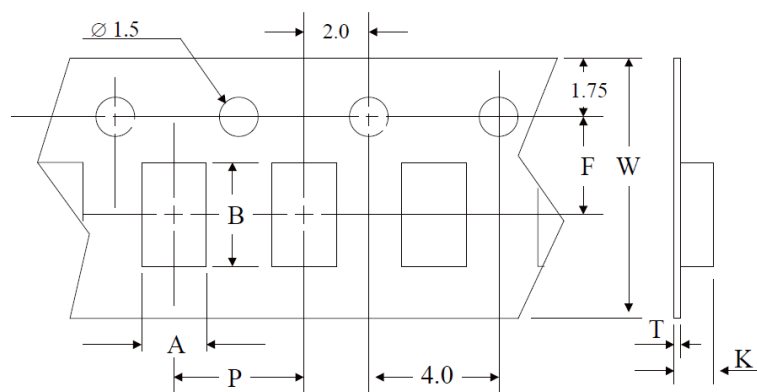


3.20 x 3.05 x 1.30 mm

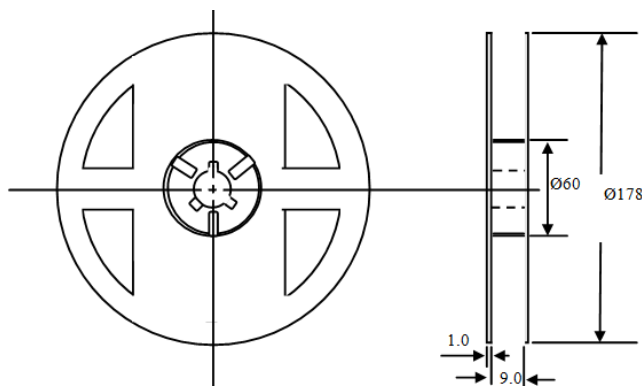
## REFLOW PROFILE



## TAPE & REEL: T2= tape and reel (2,000pcs/reel)



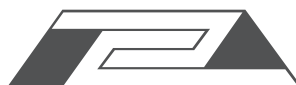
| A    | B    | P    | F    | K    | T    | W    |
|------|------|------|------|------|------|------|
| 2.69 | 3.56 | 4.00 | 3.50 | 1.42 | 0.22 | 8.00 |



Dimension: mm

**ATTENTION:** Abracon Corporation's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependant Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon Corporation is required. Please contact Abracon Corporation for more information.

ABRACON IS  
ISO 9001:2008  
CERTIFIED



**ABRACON**  
CORPORATION

Visit [www.abracon.com](http://www.abracon.com) for Terms & Conditions of Sale  
30332 Esperanza, Rancho Santa Margarita, California 92688  
tel 949-546-8000 fax 949-546-8001 [www.abracon.com](http://www.abracon.com)

Revised: 12.08.11

# AMEYA360

Components Supply Platform

Authorized Distribution Brand :



Website :

Welcome to visit [www.ameya360.com](http://www.ameya360.com)

Contact Us :

➤ Address :

401 Building No.5, JiuGe Business Center, Lane 2301, Yishan Rd  
Minhang District, Shanghai , China

➤ Sales :

Direct     +86 (21) 6401-6692  
  
Email       amall@ameya360.com  
  
QQ         800077892  
  
Skype      ameyasales1 ameyasales2

➤ Customer Service :

Email       service@ameya360.com

➤ Partnership :

Tel         +86 (21) 64016692-8333  
  
Email      mkt@ameya360.com