



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Shielded Power Inductor

ASPI-4020HI

 RoHS/RoHS II Compliant



4.4 x 4.2 x 2.0mm

FEATURES:

- High saturation current
- Low loss due to low DC resistance
- Low profile with max thickness 2.1mm
- 100% lead free and metted RoHS standard
- Suitable for reflow soldering
- Highly reliable SMD package

APPLICATIONS:

- DC/DC converters in LED driver, Notebook, Tablet, Desktop and Server
- Low profile, high current power supplies

STANDARD SPECIFICATIONS

| | |
|-----------------------------------|---|
| Abracon P/N: | ASPI-4020HI Series |
| Operating Temperature & Humidity: | -55°C to +125°C |
| Storage Temperature & Humidity: | -10 to + 40 °C, 70% RH max (In tape and reel) |

| Part Number ASPI-4020HI- Inductance Code | L(uH) | Tolerance | DCR (mΩ) max. | Isat (A) max. | Irms (A) max. |
|--|-------|-----------|------------------|------------------|------------------|
| ASPI-4020HI-R47 | 0.47 | M | 14 | 9.5 | 7.5 |
| ASPI-4020HI-1R0 | 1.0 | M | 27 | 7.0 | 6.0 |
| ASPI-4020HI-1R5 | 1.5 | M | 46 | 6.0 | 5.0 |
| ASPI-4020HI-2R2 | 2.2 | M | 58 | 5.0 | 4.5 |
| ASPI-4020HI-3R3 | 3.3 | M | 87 | 4.0 | 3.3 |
| ASPI-4020HI-4R7 | 4.7 | M | 105 | 3.0 | 2.8 |
| ASPI-4020HI-6R8 | 6.8 | M | 175 | 2.5 | 2.4 |

Test Conditions

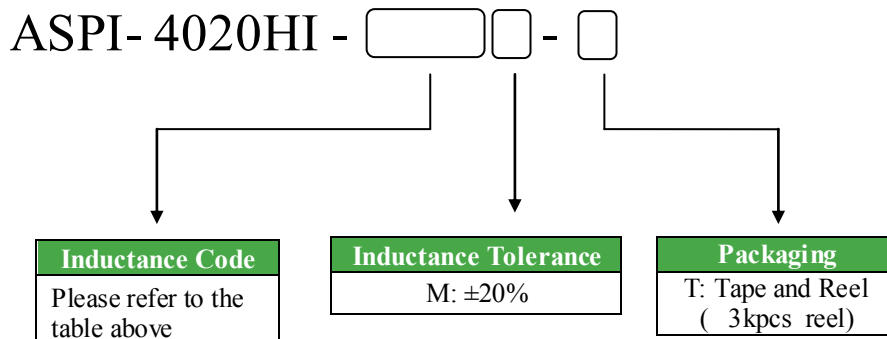
Inductance (L)

- Test equipment: Agilent4284A
- Test frequency: 100kHz, 0.25Vrms

I_{sat} would cause inductance to drop by about 30%.

I_{rms} would cause an ΔT of about 40°C.

PART NUMBER IDENTIFICATION



Shielded Power Inductor

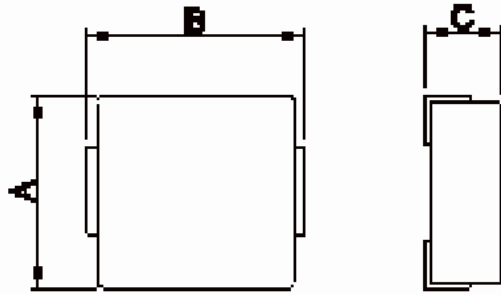
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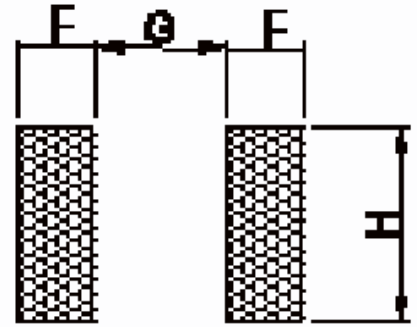
4.5 x 4.1 x 2.1mm

OUTLINE DRAWING:



| A | B | C max. |
|-----------|------------|--------|
| 4.2 ± 0.3 | 4.4 ± 0.35 | 2.0 |

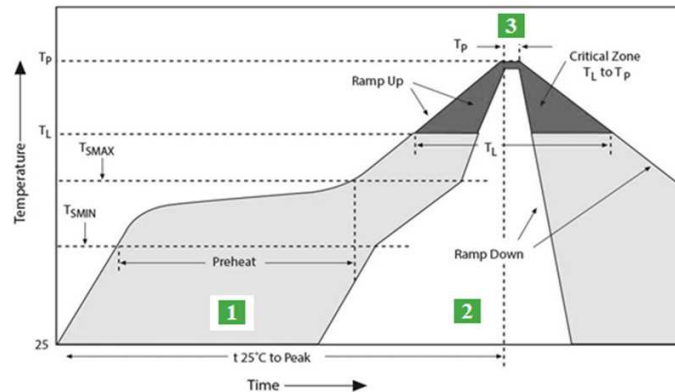
Recommended Land Pattern



| F typ | G typ | H typ |
|-------|-------|-------|
| 1.5 | 2.2 | 2.5 |

Dimension: mm

REFLOW PROFILE



| Zone | Description | Temperature | Times |
|------|-------------|--|---------------|
| 1 | Preheat | T _S MIN ~ T _S MAX 150°C ~ 200°C | 60 ~ 120 sec. |
| 2 | Reflow | T _L 217°C | 60 ~ 90 sec. |
| 3 | Peak heat | T _p 255°C | 10 sec. MAX |

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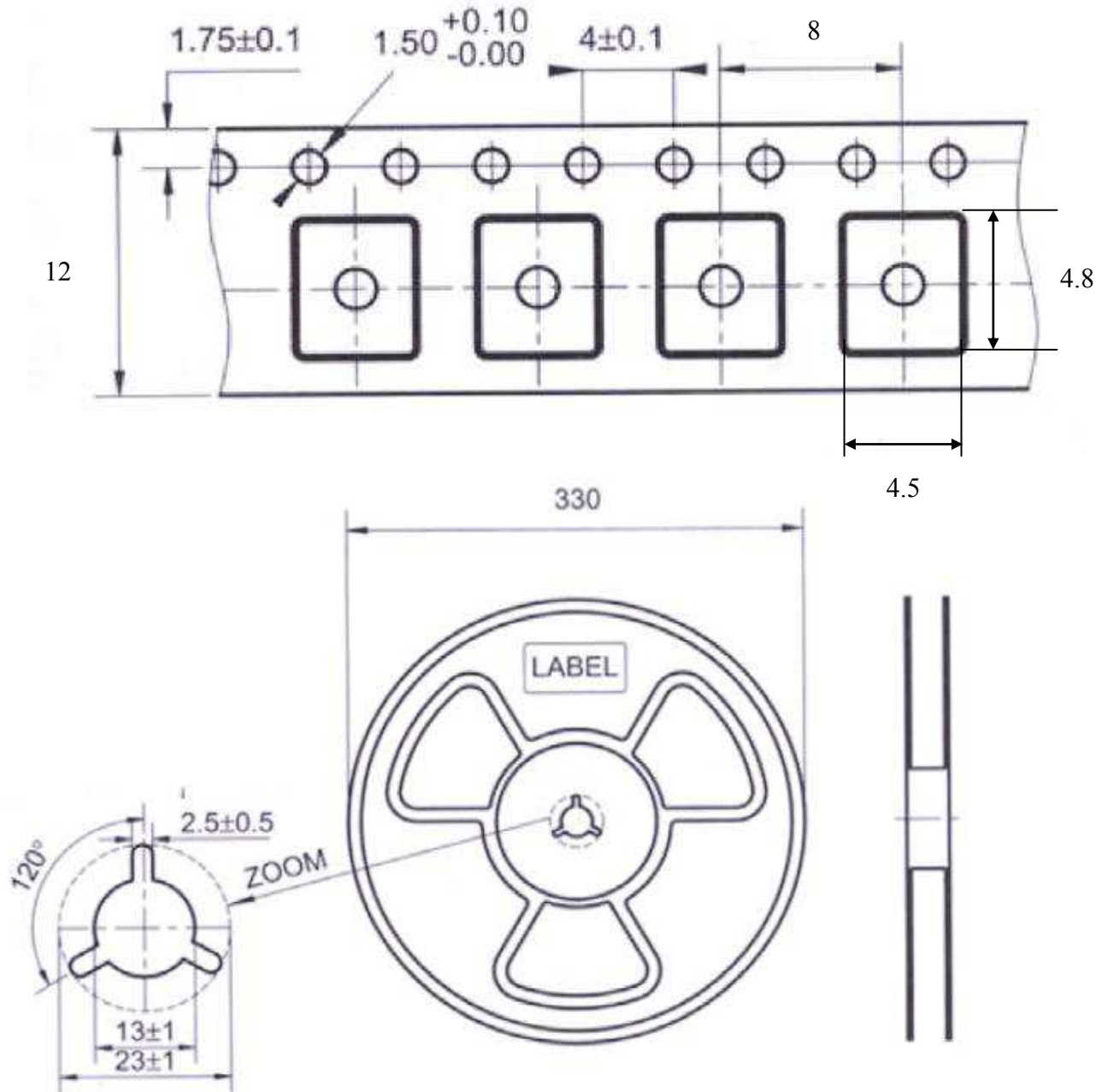


4.5 x 4.1 x 2.1mm

TAPE & REEL

Packing

T= tape and reel (3,000pc/reel)



Dimension: mm

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