

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

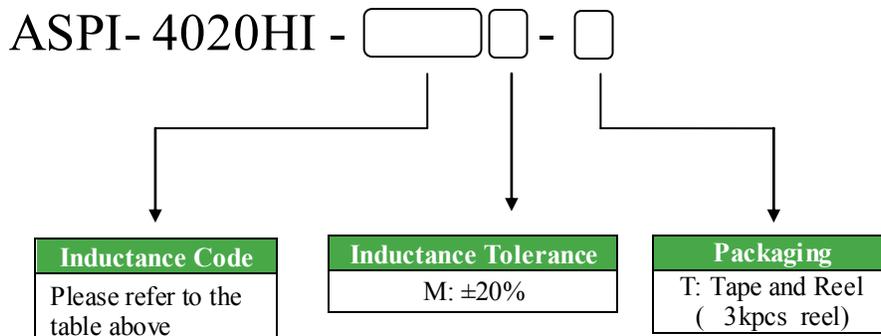
Inductance (L)

- 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

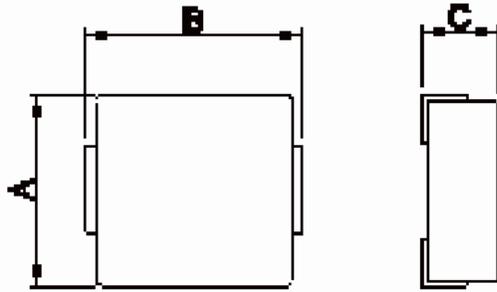
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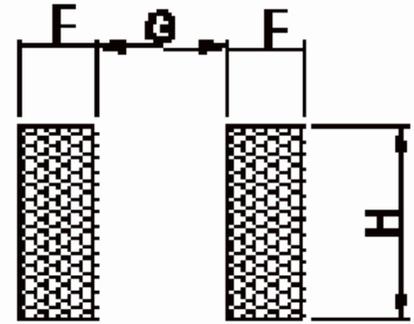
4.5 x 4.1 x 2.1mm

OUTLINE DRAWING:



A	B	C max.
4.2 ± 0.3	4.4 ± 0.35	2.0

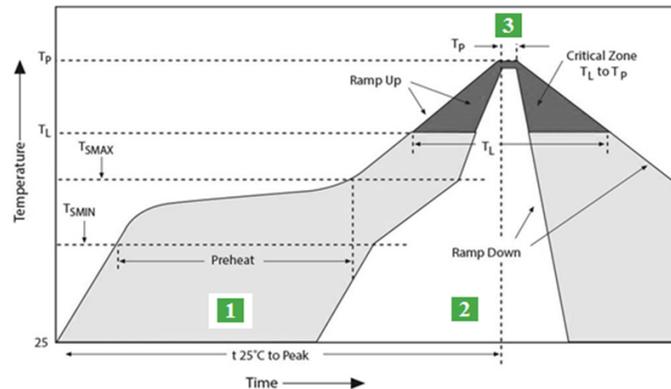
Recommended Land Pattern



F typ	G typ	H typ
1.5	2.2	2.5

Dimension: mm

REFLOW PROFILE



Zone	Description	Temperature	Times
1	Preheat	T _{SMIN} ~ T _{SMAX} 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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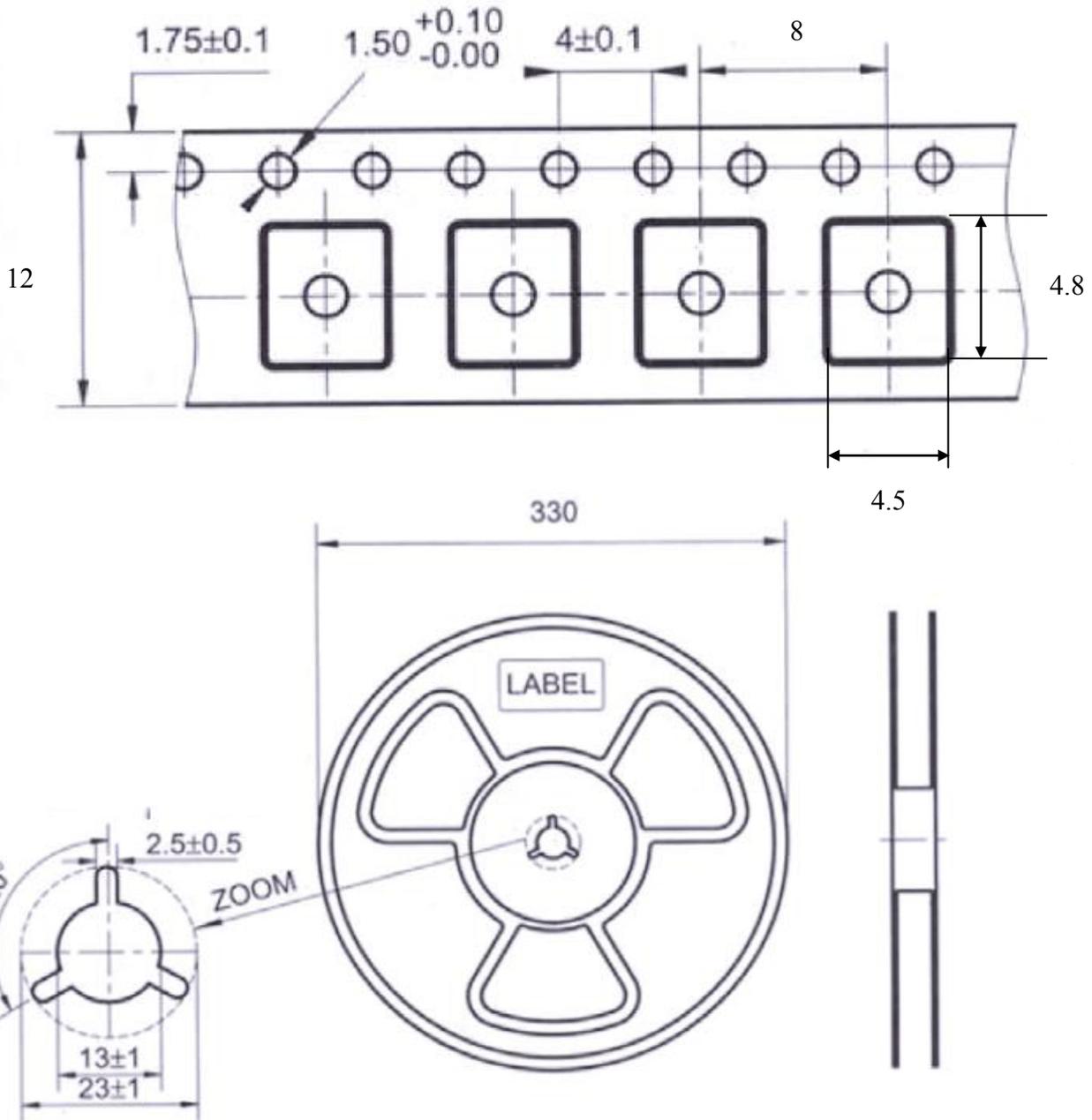


4.5 x 4.1 x 2.1mm

TAPE & REEL

Packing

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



Dimension: mm

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