

# Shielded Power Inductor

ASPI-4020HI

 **RoHS/RoHS II Compliant**  
MSL = 1



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 meet 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

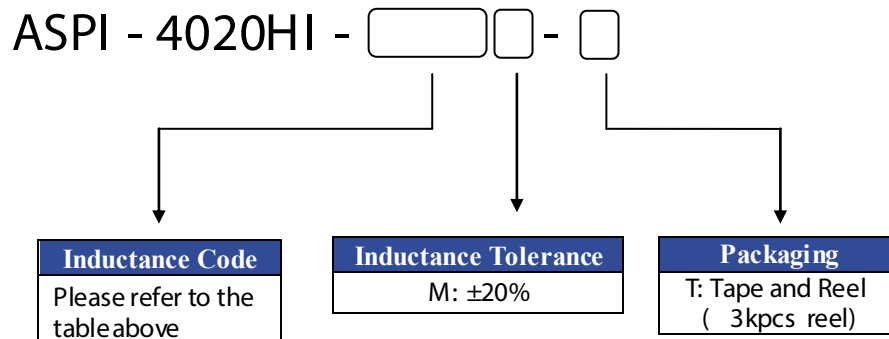
Abrakon P/N:	ASPI-4020HI Series
Operating Temperature & Humidity:	-55°C to +125°C
Storage Temperature & Humidity:	-10 to + 40 °C, 70% RH max (In tape and reel)

Part Number ASPI-4020HI- Inductance Code	L(uH)	Tolerance	DCR (mΩ) max.	Isat (A) Typ.	Irms (A) Typ.
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

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

$I_{rms}$  would cause an  $\Delta T$  of about 40°C.

## PART NUMBER IDENTIFICATION



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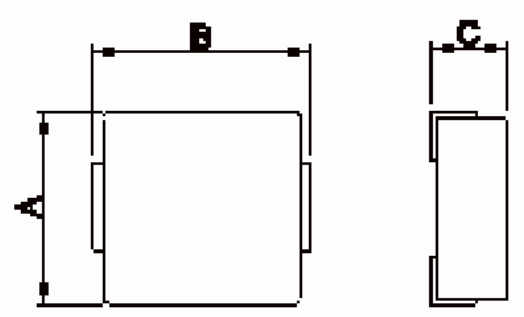
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MSL = 1



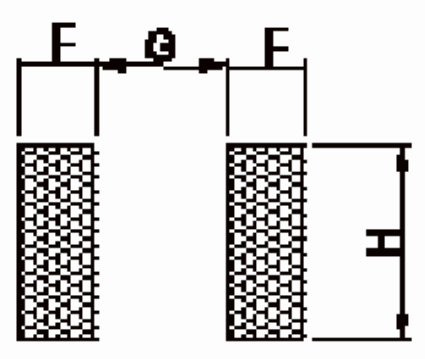
4.5 x 4.1 x 2.1mm

## OUTLINE DRAWING:



A	B	C max.
4.2 ± 0.3	4.4 ± 0.35	2.0

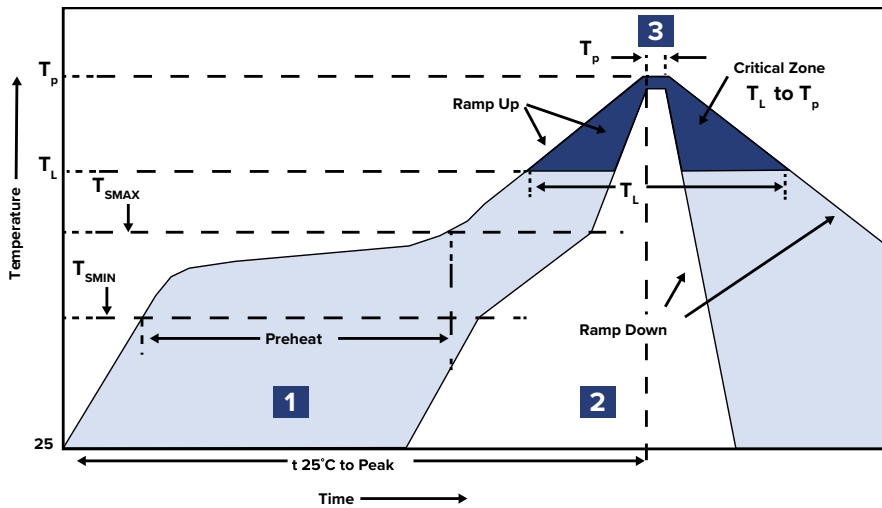
### Recommended Land Pattern



F typ	G typ	H typ
1.5	2.2	2.5

**Dimension: mm**

## REFLOW PROFILE



Zone	Description	Temperature	Time
1	Preheat / Soak	$T_{SMIN} \sim T_{SMAX}$ 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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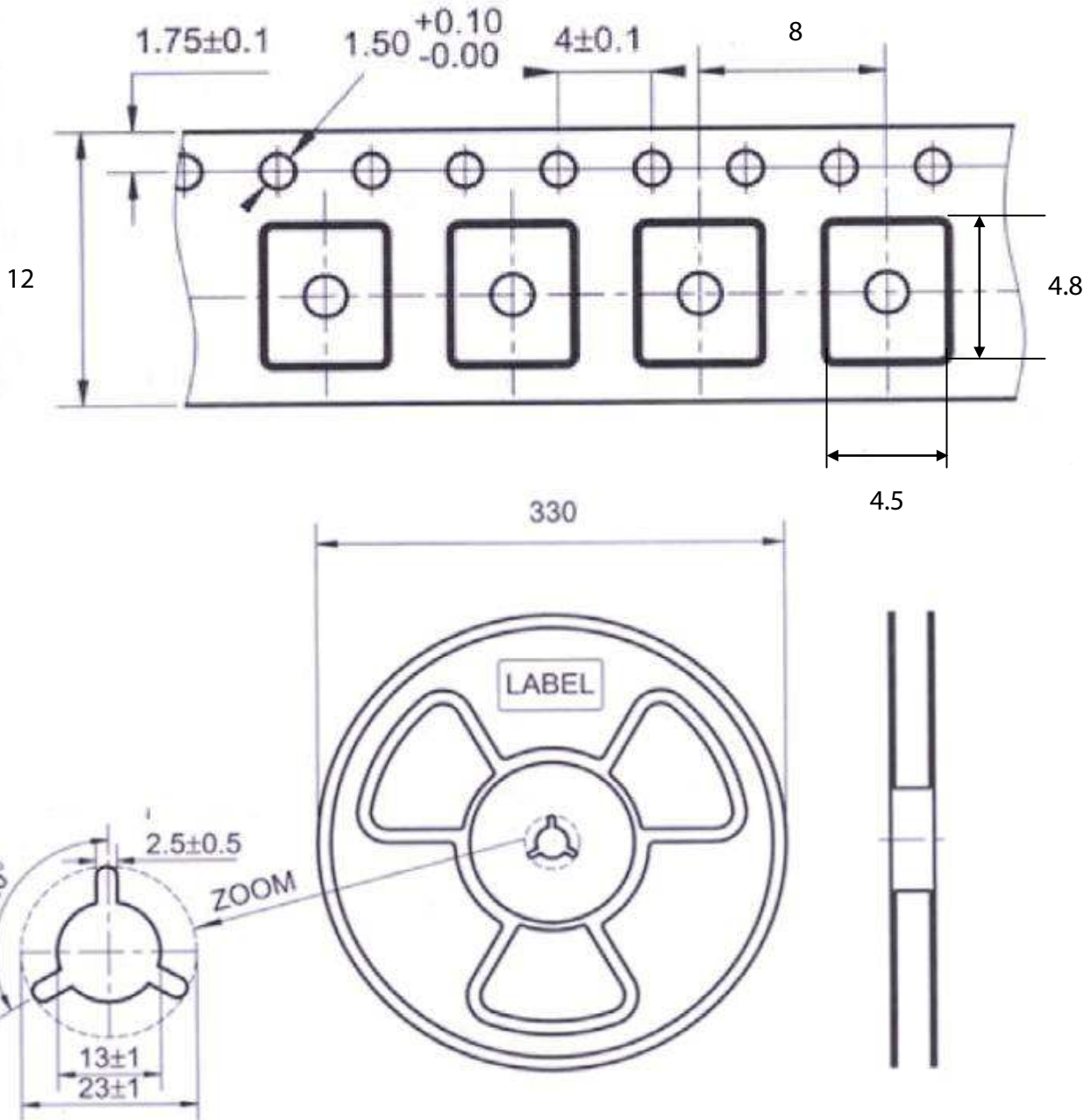


4.5 x 4.1 x 2.1mm

## TAPE & REEL

### Packing

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



Dimension: mm

**ATTENTION:** Abracon LLC'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-dependent 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 LLC is required. Please contact Abracon LLC for more information.