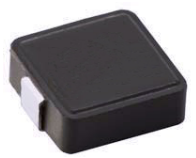# Shielded Power Inductor

ASPI-4020HI

Pb **RoHS/RoHS II Compliant**

4.5 x 4.1 x 2.1mm

FEATURES:

• High saturation current
• Low loss due to low DC resistance
• Low profile with max thickness 2.1mm
•100% lead free and meeted 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 +155˚C
Storage Temperature & Humidity:	+25±3˚C, 80% RH max (In tape and reel)

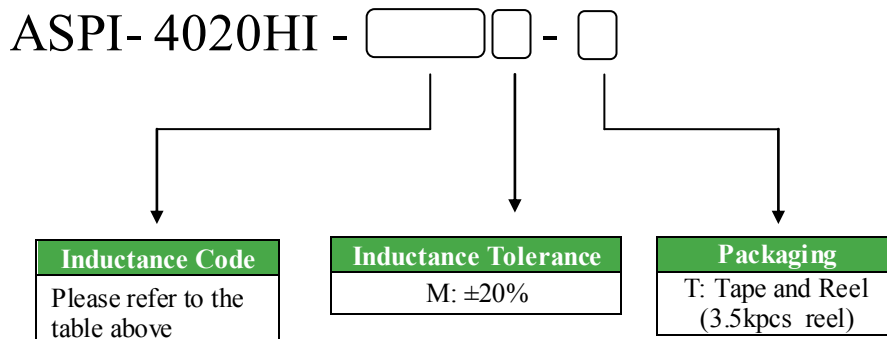| Part Number ASPI-4020HI- Inductance Code	L(uH)	Tolerance	DCR (mΩ) max.	Isat (A) max.	Irms (A) max.
ASPI-4020HI-R10	0.10	M	4.0	22.0	12.0
ASPI-4020HI-R22	0.22	M	6.6	12.5	9.0
ASPI-4020HI-R47	0.47	M	14	9.5	7.0
ASPI-4020HI-R56	0.56	M	16	8.5	6.5
ASPI-4020HI-1R0	1.0	M	27	7.0	4.5
ASPI-4020HI-1R5	1.5	M	46	6.0	4.0
ASPI-4020HI-2R2	2.2	M	58	5.0	3.0
ASPI-4020HI-3R3	3.3	M	87	4.0	2.5

Test Conditions

Inductance (L)
a. Test equipment: Agilent4284A
b. Test frequency: 100kHz, 0.25Vrms

I_{sat} would cause inductance to drop by about 30%.
I_{rms} would cause an Δ T of about 40°C.
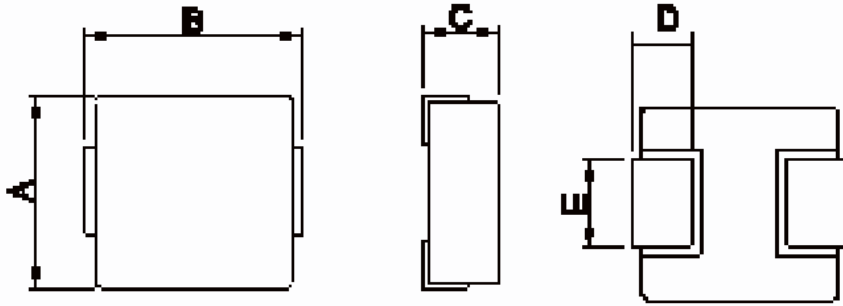
PART NUMBER IDENTIFICATION

ASPI- 4020HI - ☐☐ - ☐

Inductance Code	Inductance Tolerance	Packaging
Please refer to the table above	M: ±20%	T: Tape and Reel (3.5kpcs reel)

ABRACON IS ISO 9001:2008 CERTIFIED

ABRACON CORPORATION

Visit 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

Revised: 01.30.14

Shielded Power Inductor

ASPI-4020HI

4.5 x 4.1 x 2.1mm

▷ OUTLINE DRAWING:

Recommended Land Pattern

A	B	C max.	D	E
4.1±0.5	4.5±0.5	2.1	0.8±0.5	1.5±0.5
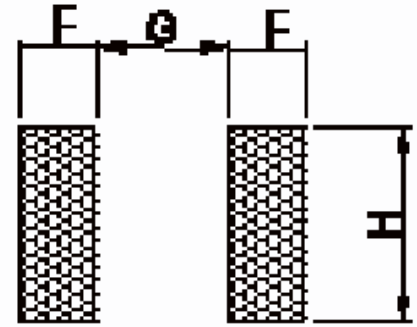
F	G	H
1.5	2.5	2.2

Dimension: mm

▷ REFLOW PROFILE

TEMP ℃

peak 265℃
260℃ / 10S

245
220   Heat-up rate ≈ 3K/s   Cooling rate ≈ 6K/s
180
150

Pre-heating

Max 20S

90s~120S   Max 60S

Number of reflow cycles allowed: 3 times   Time (Sec.)
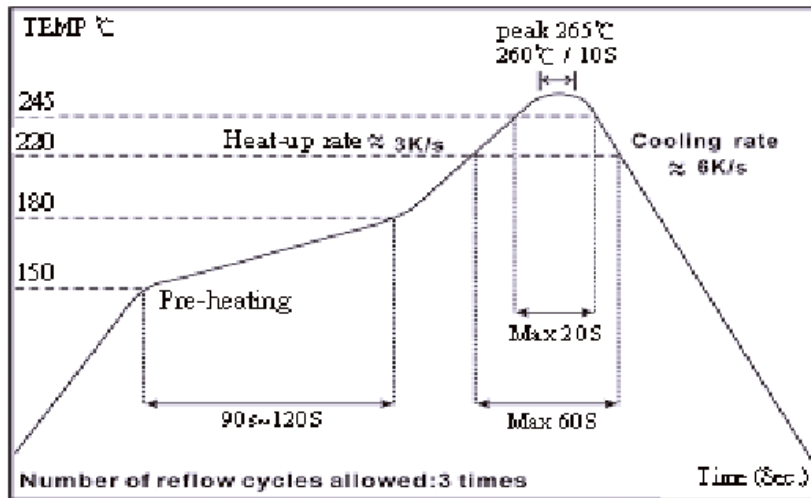
Pb **RoHS/RoHS II Compliant**
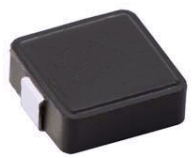
4.5 x 4.1 x 2.1mm

▷ **TAPE & REEL**

Packing
T= tape and reel (3,500pcsreel)

Dimension: mm