

Molded Type Power Inductors



ASPI-4020HI Series

Request Samples



Check Inventory



4.4 x 4.2 x 2.0 mm
RoHS/RoHS II Compliant
MSL Level = 1

Features

- High saturation current
- Low loss due to low DC resistance
- Low profile with max thickness 2.0mm
- 100% lead free and meets 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

Electrical Specifications

Part Number	Inductance	Tolerance	DC Resistance	Saturation Current	Temperature Rise Current
	0.1MHz/1.0V		Max	Typ.	Typ.
Units	μH	%	mΩ	A	A
Symbol	L	M	DCR	Isat	Irms
ASPI-4020HI-R10	0.10	±20%	4.0	22.0	13.0
ASPI-4020HI-R22	0.22	±20%	6.6	12.5	9.5
ASPI-4020HI-R33	0.33	±20%	11.0	12.0	10.0
ASPI-4020HI-R47	0.47	±20%	14	9.5	7.5
ASPI-4020HI-R56	0.56	±20%	16	9.0	7.0
ASPI-4020HI-R68	0.68	±20%	18	8.0	7.0
ASPI-4020HI-1R0	1.0	±20%	27	7.0	6.0
ASPI-4020HI-1R2	1.2	±20%	27	6.5	6.0
ASPI-4020HI-1R5	1.5	±20%	46	5.5	5.0
ASPI-4020HI-2R2	2.2	±20%	58	5.0	4.5
ASPI-4020HI-3R3	3.3	±20%	87	3.5	3.3
ASPI-4020HI-4R7	4.7	±20%	105	3.0	2.8
ASPI-4020HI-6R8	6.8	±20%	175	2.5	2.4
ASPI-4020HI-100	10.0	±20%	282	2.0	1.6
ASPI-4020HI-220	22.0	±20%	363	1.4	1.2

Test Conditions

Isat: DC current at which the inductance drops 30% from its value without current.

Irms: DC current that causes the temperature rise (ΔT , approximate 40 °C) from 25°C ambient

Operating Temperature: -55°C ~ +125°C (including self-temperature rise)

Storage Condition: -55°C ~ +125°C (on board), -10°C ~ +40°C (with packaging) and R.H. 60 max

ASPI-4020HI Series is **RoHS Compliant and Pb free**

Molded Type Power Inductors



ASPI-4020HI Series

Request Samples

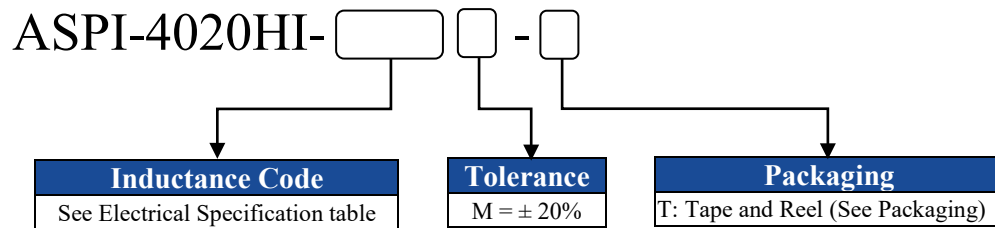


Check Inventory

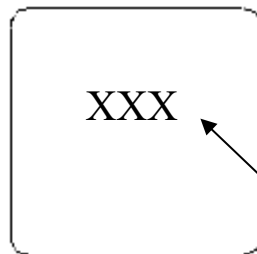


4.4 x 4.2 x 2.0 mm
RoHS/RoHS II Compliant
MSL Level = 1

Part Identification



Marking



Inductance Code

e.g. 2R2

Marking Method = Ink Marking

Molded Type Power Inductors



ASPI-4020HI Series

Request Samples

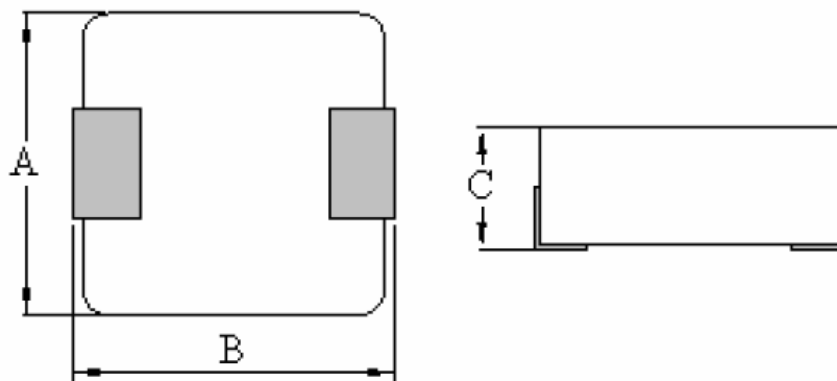


Check Inventory



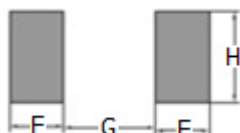
4.4 x 4.2 x 2.0 mm
RoHS/RoHS II Compliant
MSL Level = 1

Mechanical Specifications



Series	A	B	C
ASPI-4020HI	4.2±0.3	4.4±0.35	2.0 MAX

Recommend PCB Layout



F	G	H
1.5 ref	2.2 ref	2.5 ref.

Dimensions: mm

Molded Type Power Inductors



ASPI-4020HI Series

Request Samples

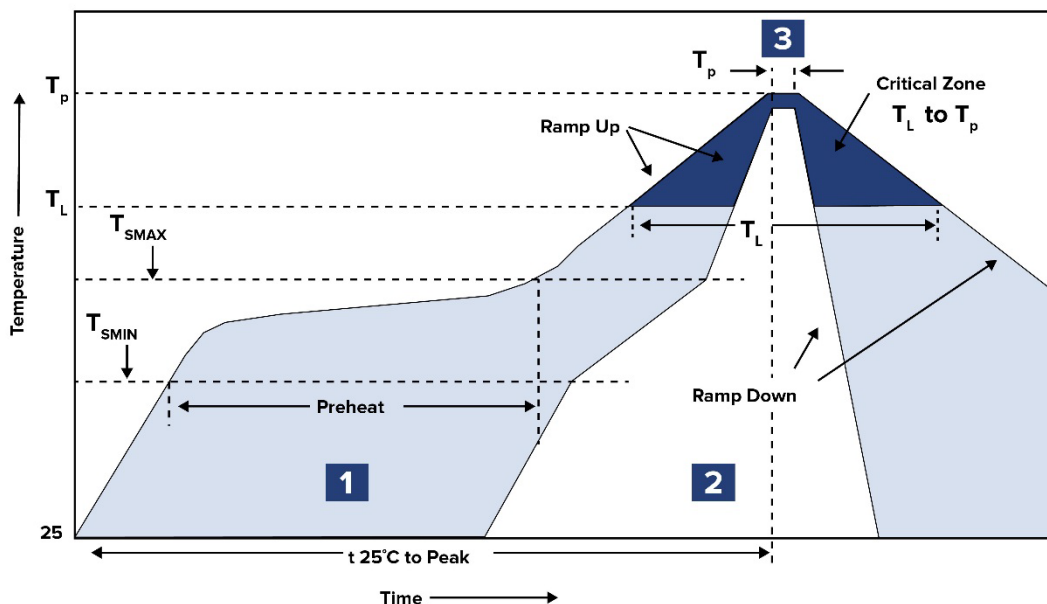


Check Inventory



4.4 x 4.2 x 2.0 mm
RoHS/RoHS II Compliant
MSL Level = 1

Reflow Profile



Zone	Description	Temperature	Times
1	Preheat	$T_{SMIN} \sim T_{SMAX}$ 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

Packaging



5101 Hidden Creek Ln, Spicewood TX 78669
Phone: 512-371-6159 Fax: 512-351-8858
For terms and conditions of sales, please visit:
www.abracon.com

REVISION C : 4/3/2024

ABRACON IS
ISO9001-2015
CERTIFIED

Molded Type Power Inductors



ASPI-4020HI Series

Request Samples

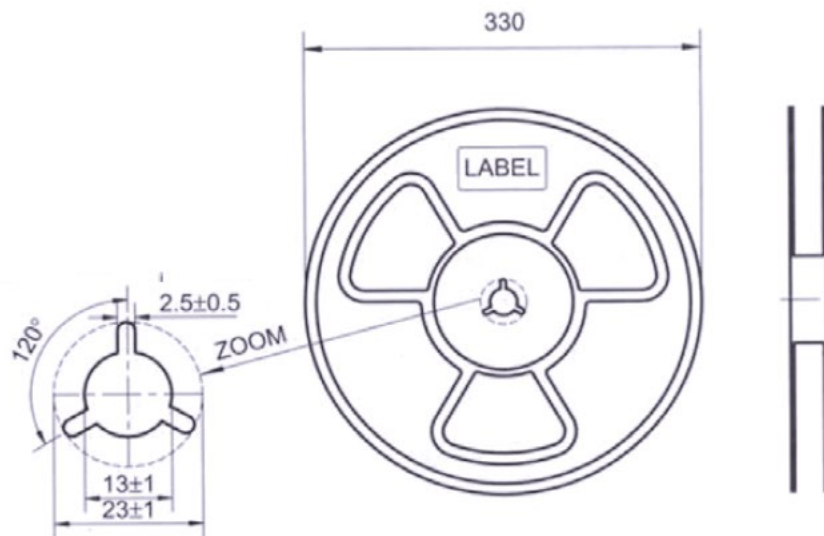
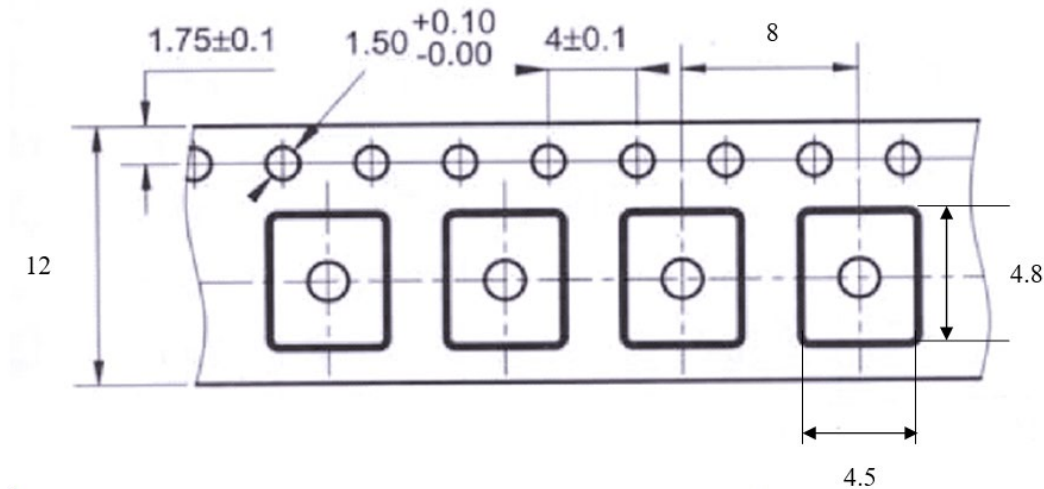


Check Inventory



4.4 x 4.2 x 2.0 mm
RoHS/RoHS II Compliant
MSL Level = 1

Tape & Reel: 3000pcs/reel



Dimensions: mm

ATTENTION: Abracon LLC's products are Commercial-Off-The-Shelf (COTS, which are designed, intended and validated for use in commercial, industrial and automotive applications. The customer is responsible for testing and verifying the performance of an Abracon solution to meet their system-level requirements.



5101 Hidden Creek Ln, Spicewood TX 78669
Phone: 512-371-6159 Fax: 512-351-8858
For terms and conditions of sales, please visit:
www.abracon.com

REVISION C : 4/3/2024

ABRACON IS
ISO9001-2015
CERTIFIED