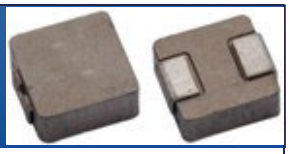
Molded Type Power Inductor



ASPI-0530HI Series

Request Samples Check Inventory

5.7 x 5.3 x 3.0 mm
RoHS/RoHS II Compliant
MSL Level = 1

Features

- High saturation current.
- Low loss due to low DC resistance.
- Frequency application up to 3MHz.
- Low profile with max thickness 3.0mm.
- 100% lead free and RoHS compliant.
- Suitable for reflow soldering.
- High reliable SMD package

Applications

- DC/DC converters in Notebook, Netbook, desktop, and server
- Low profile, high current power supplies.

Electrical Specifications

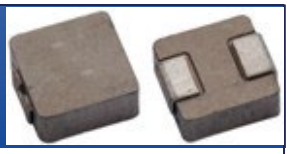
Part Number	Inductance	Tolerance	DCR Typ	DCR Max	Saturation Current	Temperature Rise Current
Units	µH	%	mΩ	mΩ	A	A
Symbol	L	M			Isat*	Irms*
ASPI-0530HI-R22	0.22	M	4.0	5.0	23.0	15.0
ASPI-0530HI-R33	0.33	M	5.0	6.0	20.0	12.0
ASPI-0530HI-R47	0.47	M	6.3	7.4	18.0	13.0
ASPI-0530HI-R68	0.68	M	9.1	10.0	14.0	10.0
ASPI-0530HI-1R0	1.0	M	13.0	14.0	11.0	7.0
ASPI-0530HI-1R5	1.5	M	20.0	25.0	10.0	6.0
ASPI-0530HI-2R2	2.2	M	29.0	35.0	9.0	5.5
ASPI-0530HI-3R3	3.3	M	34.0	38.0	8.0	5.0
ASPI-0530HI-4R7	4.7	M	54.0	60.0	4.5	4.5
ASPI-0530HI-5R6	5.6	M	55.0	65.0	4.0	4.5
ASPI-0530HI-6R8	6.8	M	65.0	76.5	4.0	3.8
ASPI-0530HI-100	10.0	M	104	120	3.5	3.2

Test Conditions

1. Inductance is measured in HP-4284A Precision LCR Meter.
2. RDC is measured in HP-4338B milli ohm meter. (Or equivalent).
3. Isat: Based on inductance change (△L/Lo: ≤ -20%)
4. Irms: Based on temperature rise (△T: 40ºC TYP.)

Operating Temperature & Humidity: -55˚C to +125˚C (Including self-generated heat)
Storage Temperature & Humidity: +25˚C to +35˚C, 45% to 75% RH
Maximum Voltage: 30VDC

Molded Type Power Inductor



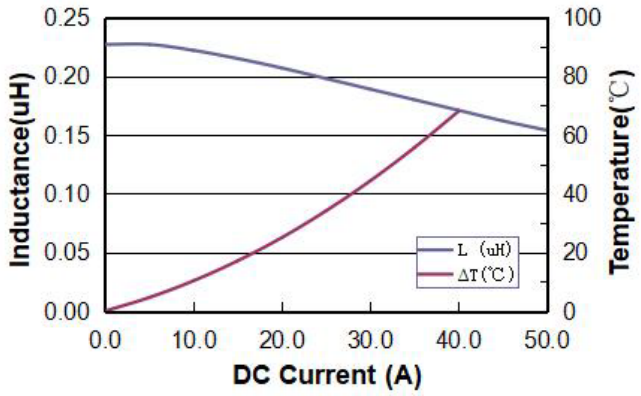
ASPI-0530HI Series

Request Samples Check Inventory

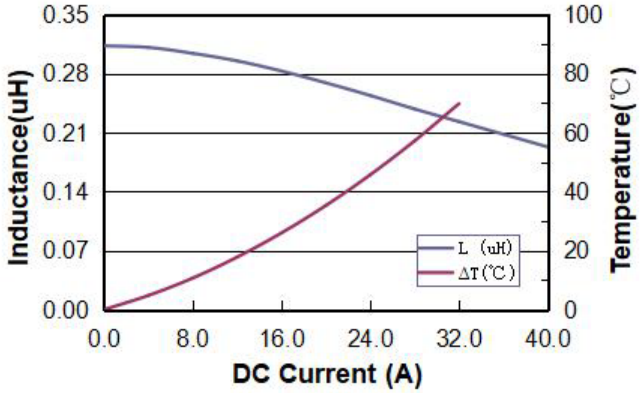
5.7 x 5.3 x 3.0 mm
RoHS/RoHS II Compliant
MSL Level = 1

Performance Graphs

ASPI-0530HI-R22



ASPI-0530HI-R33



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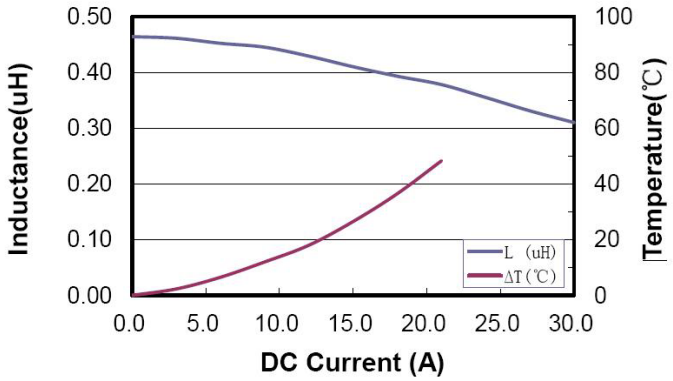

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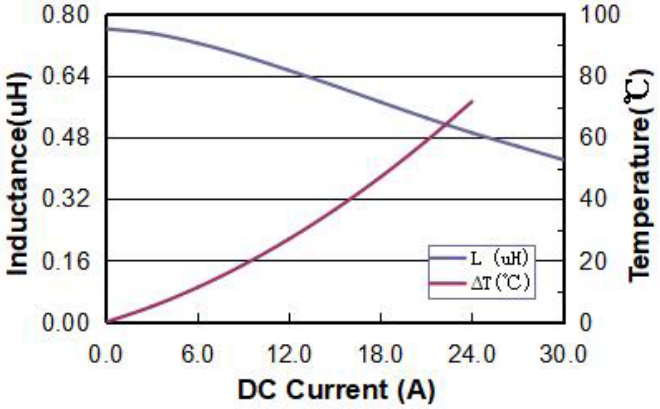
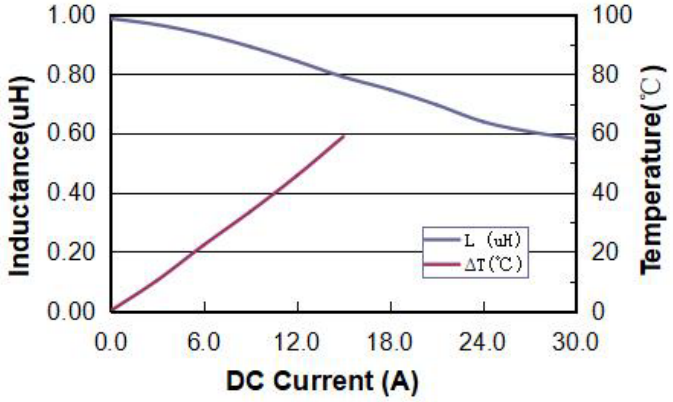
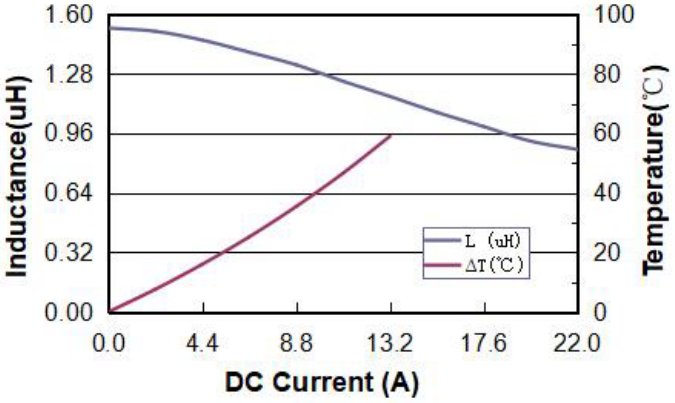


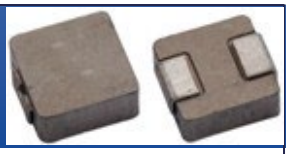
ASPI-0530HI-1R0



ASPI-0530HI-1R5



Molded Type Power Inductor



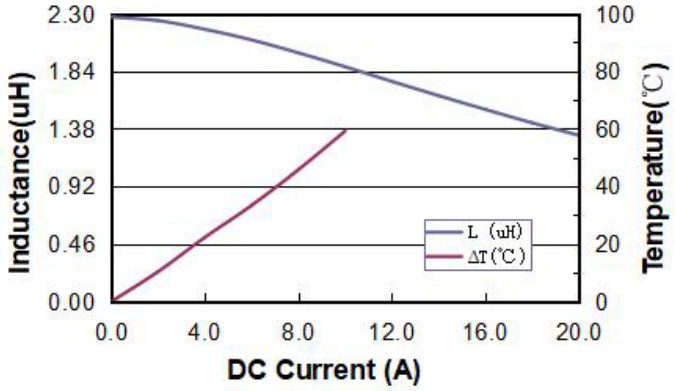
ASPI-0530HI Series

Request Samples Check Inventory

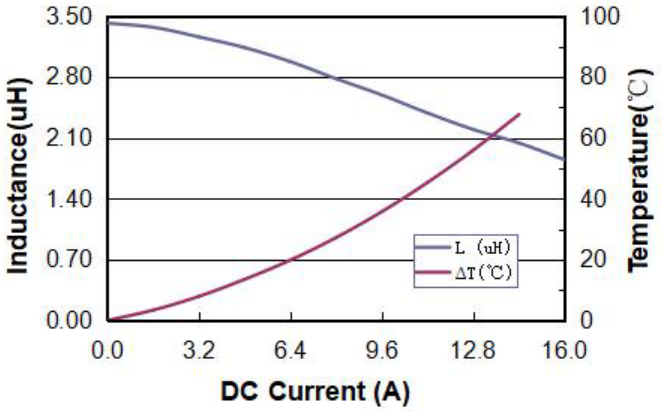
5.7 x 5.3 x 3.0 mm
RoHS/RoHS II Compliant
MSL Level = 1

Performance Graphs

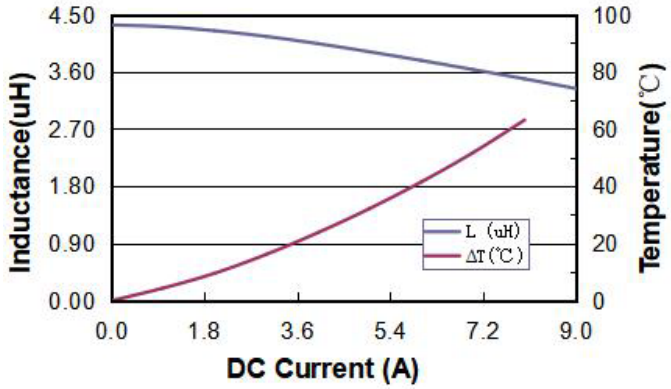
ASPI-0530HI-2R2



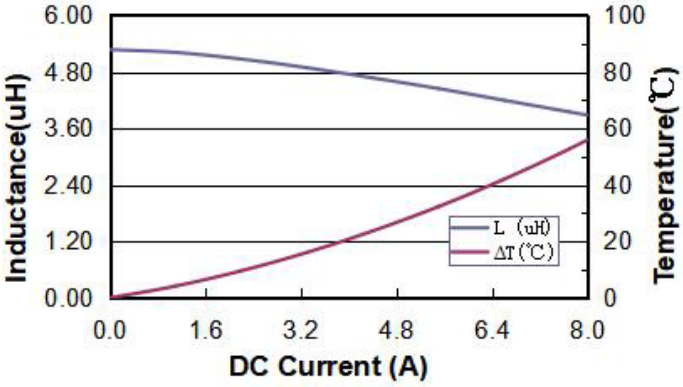
ASPI-0530HI-3R3



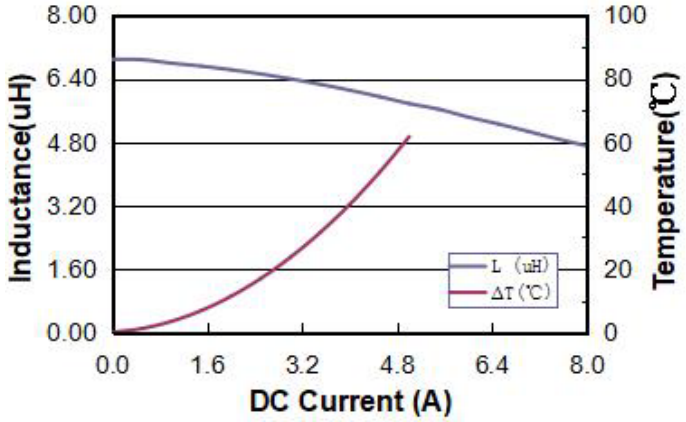
ASPI-0530HI-4R7



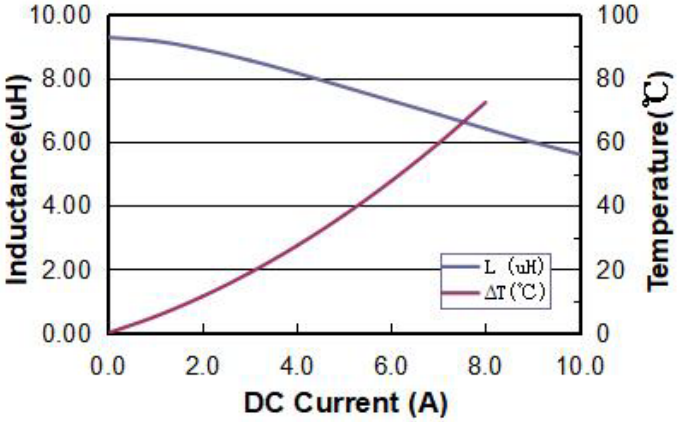
ASPI-0530HI-5R6



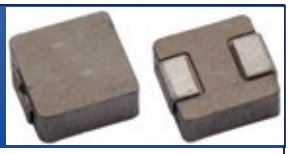
ASPI-0530HI-6R8



ASPI-0530HI-100



Molded Type Power Inductor

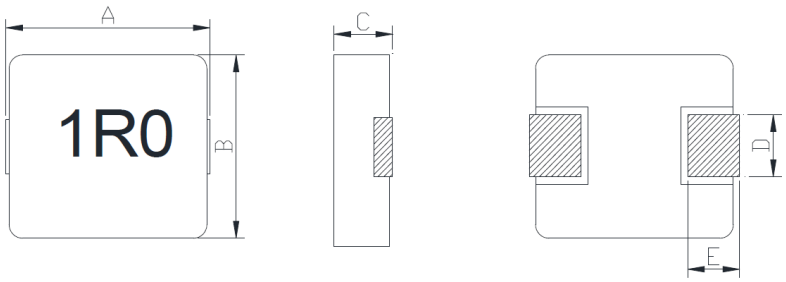


ASPI-0530HI Series

Request Samples Check Inventory

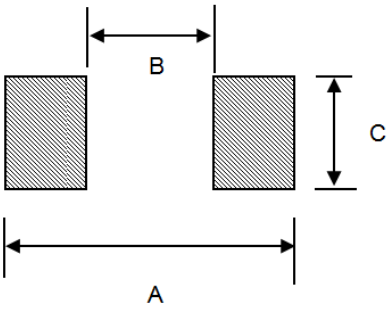
5.7 x 5.3 x 3.0 mm
RoHS/RoHS II Compliant
MSL Level = 1

Mechanical Specifications



A	B	C	D	E
5.7 ±0.30	5.3 ±0.40	3.0 MAX	2.2 ±0.5	1.2 ±0.50

Recommended Land Pattern



A	B	C
7.0 Typ.	3.0 Typ.	2.5 Typ.

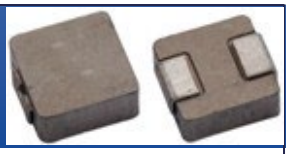
Dimensions: mm

Part Number Identification

ASPI-0530HI - ☐ ☐ - ☐

Inductance Code	Tolerance	Packaging
Please refer to the Electrical Specifications Table	M: ±20%	T2: Tape & Reel 2,000 units

Molded Type Power Inductor



ASPI-0530HI Series

Request Samples Check Inventory

5.7 x 5.3 x 3.0 mm
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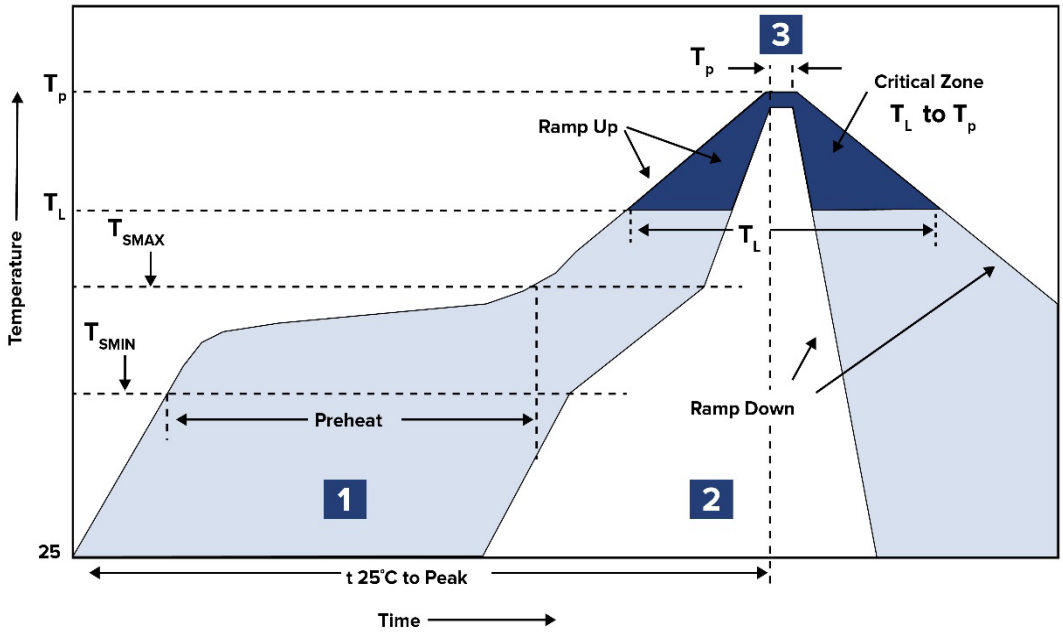
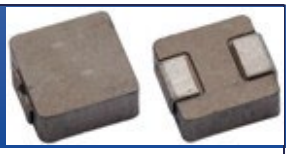
MSL Level = 1

Reflow Profile



Zone	Description	Temperature	Times
1	Preheat	T_{SMIN} ~ T_{SMAX} 150°C ~ 200°C	60 ~ 120 sec.
2	Reflow	T_L 200°C	20 sec.
3	Peak heat	T_P 250°C	3 sec. MAX

Molded Type Power Inductor



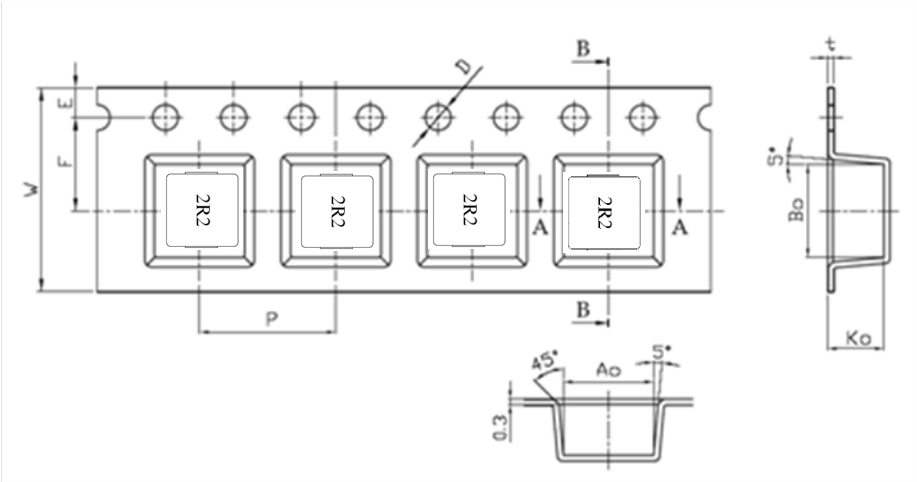
ASPI-0530HI Series

Request Samples Check Inventory

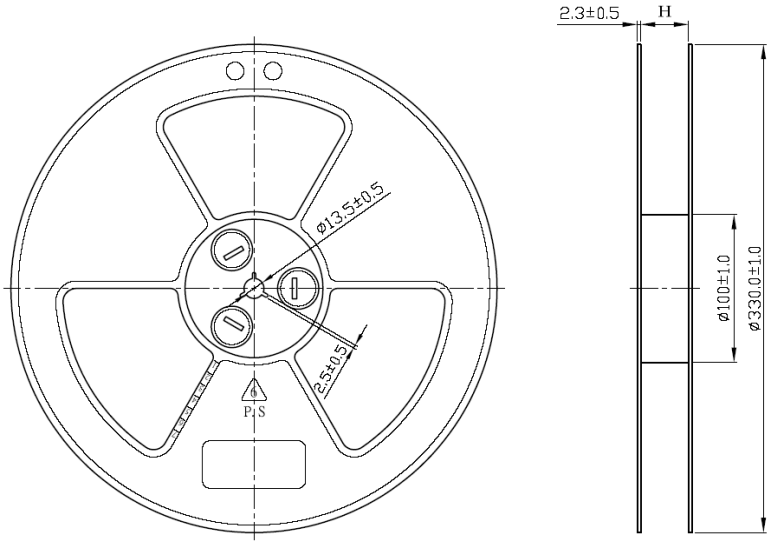
5.7 x 5.3 x 3.0 mm
RoHS/RoHS II Compliant
MSL Level = 1

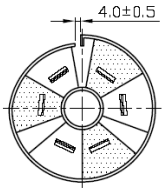
Packaging

T2: 2,000pcs / reel



A0	5.7 ±0.3
B0	5.9 ±0.3
K0	3.4 ±0.3
P	8.0 ±0.1
t	0.4 Typ
W	12 ±0.3
E	1.75 ±0.1
F	5.5 ±0.1
D	1.5 ±0.1
H	12.5





Dimension: mm

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