

Molding Type Power Inductor

ASPI-0630HI



RoHS
Compliant



7.2 x 6.65 x 3.0 mm

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 metted RoHS standard.
- Suitable for reflow soldering.
- High reliable SMD package

APPLICATIONS:

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

STANDARD SPECIFICATIONS

| | |
|-----------------------------------|---|
| Abrakon P/N: | ASPI-0630HI Series |
| Operating Temperature & Humidity: | -55°C to +125°C (Including self generated heat) |
| Storage Temperature & Humidity: | +25°C to +35°C, 45% to 85% RH |

| 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-0630HI-1R0 | 1.0 | M | 9.0 | 10.0 | 20.5 | 11.0 |
| ASPI-0630HI-1R5 | 1.5 | M | 14.0 | 15.0 | 17.0 | 9.0 |
| ASPI-0630HI-2R2 | 2.2 | M | 18.0 | 20.0 | 14.0 | 8.0 |
| ASPI-0630HI-3R3 | 3.3 | M | 28.0 | 30.0 | 13.5 | 6.8 |
| ASPI-0630HI-4R7 | 4.7 | M | 37.0 | 40.0 | 10.0 | 5.5 |
| ASPI-0630HI-6R8 | 6.8 | M | 54.0 | 60.0 | 8.0 | 4.5 |
| ASPI-0630HI-100 | 10.0 | M | 102.0 | 105.0 | 7.0 | 3.0 |

Test Conditions

Inductance is measured in HP-4285A Precision LCR Meter.

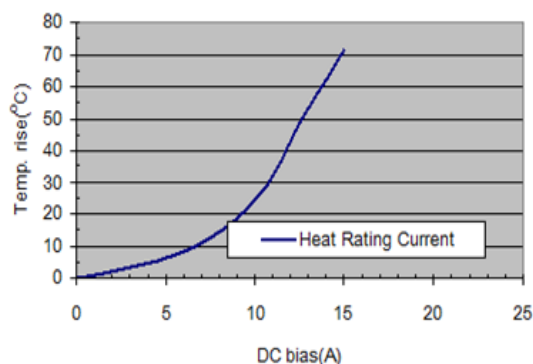
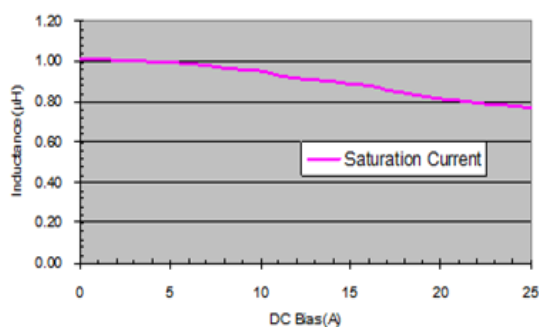
RDC is measured in HP-4338B milli ohm meter.(or equivalent).

Isat: Based on inductance change ($\Delta L/L_0 : \leq -20\%$)

Irms: Based on temperature rise ($\Delta T : 40^\circ\text{C TYP.}$)

ELECTRICAL CHARACTERISTIC CU

ASPI-0630HI-1R0



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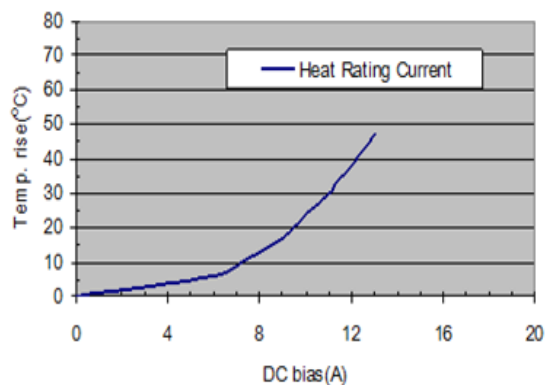
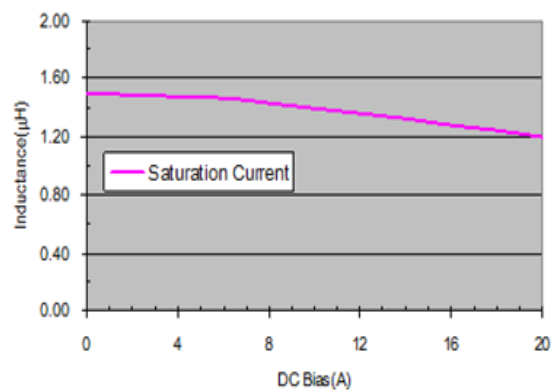
RoHS
Compliant



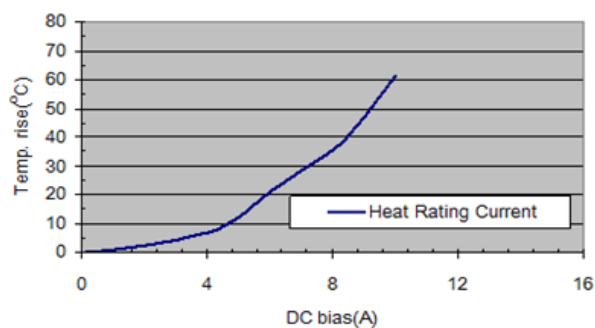
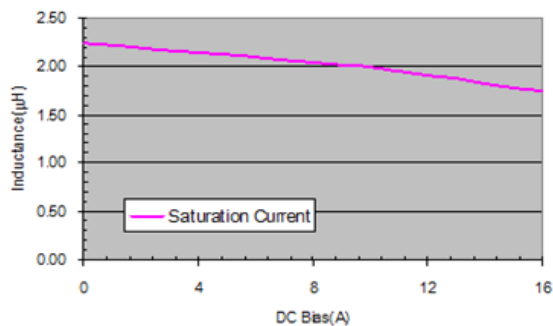
7.2 x 6.65 x 3.0 mm

ELECTRICAL CHARACTERISTIC CURVES

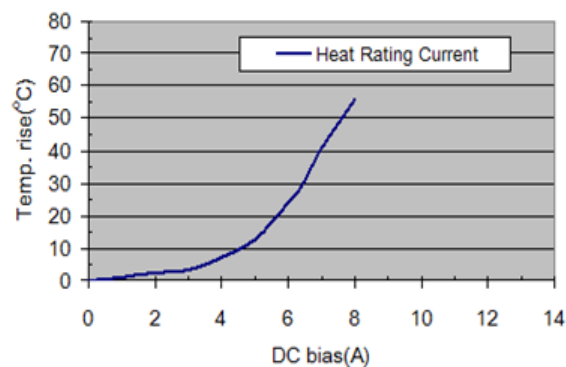
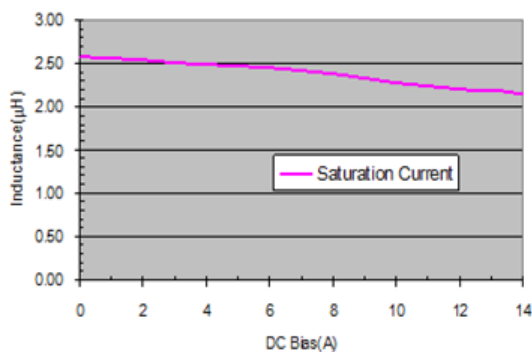
ASPI-0630HI-1R5



ASPI-0630HI-2R2



ASPI-0630HI-3R3



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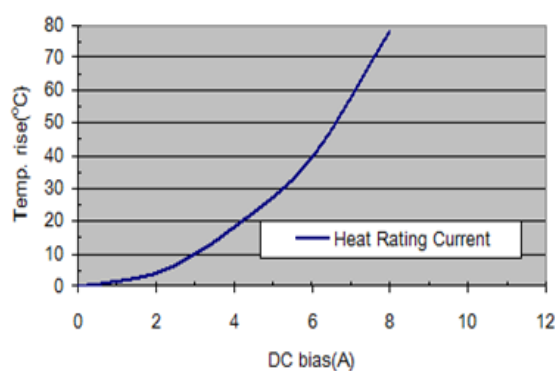
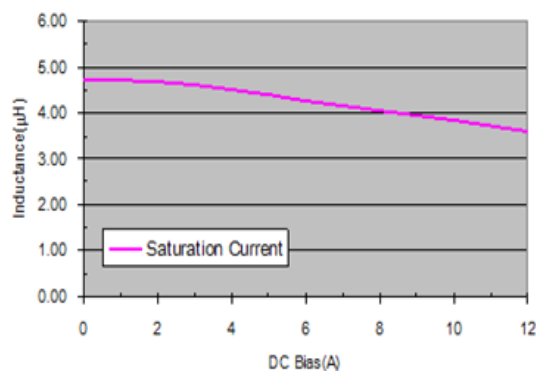
RoHS
Compliant



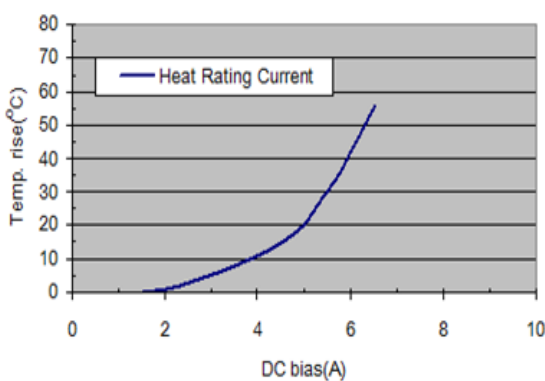
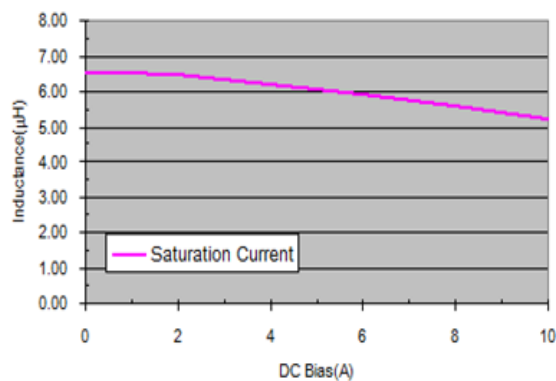
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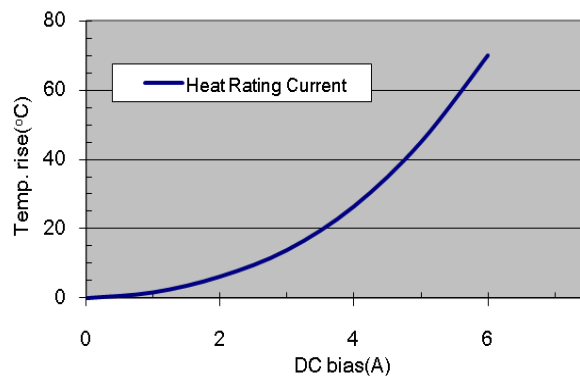
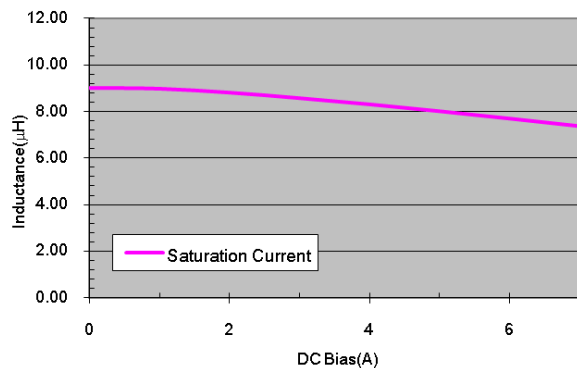
ASPI-0630HI-4R7



ASPI-0630HI-6R8



ASPI-0630HI-100



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PART NUMBER IDENTIFICATION

ASPI-0630HI- -

Inductance Code

Please refer to the
Electrical Spec Table

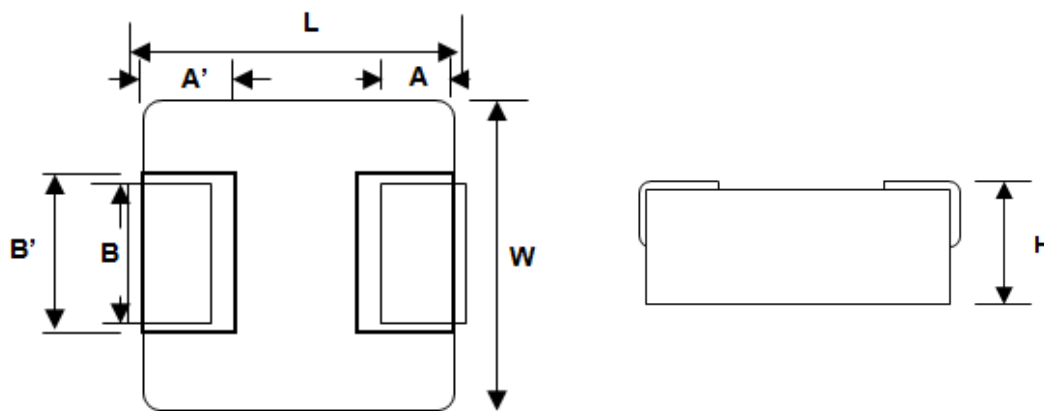
Tolerance

M: $\pm 20\%$

Packaging

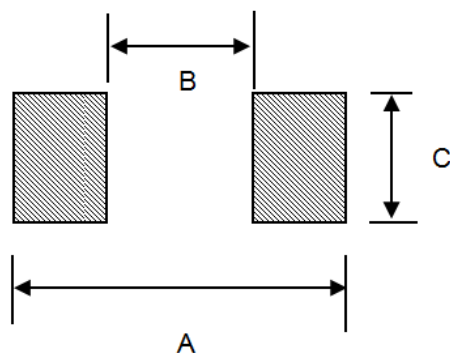
T15: Tape and Reel (1.5kpcs /
reel)

OUTLINE DRAWING:



| A | A' | B | B' | L | W | H max |
|---------------|---------------|---------------|---------------|---------------|----------------|-------|
| 1.6 ± 0.4 | 2.0 ± 0.1 | 3.0 ± 0.3 | 3.4 ± 0.2 | 7.2 ± 0.3 | 6.65 ± 0.2 | 3.0 |

Recommended Land Pattern



| A | B | C |
|-----|-----|-----|
| 8.4 | 3.7 | 3.4 |

Dimension: mm



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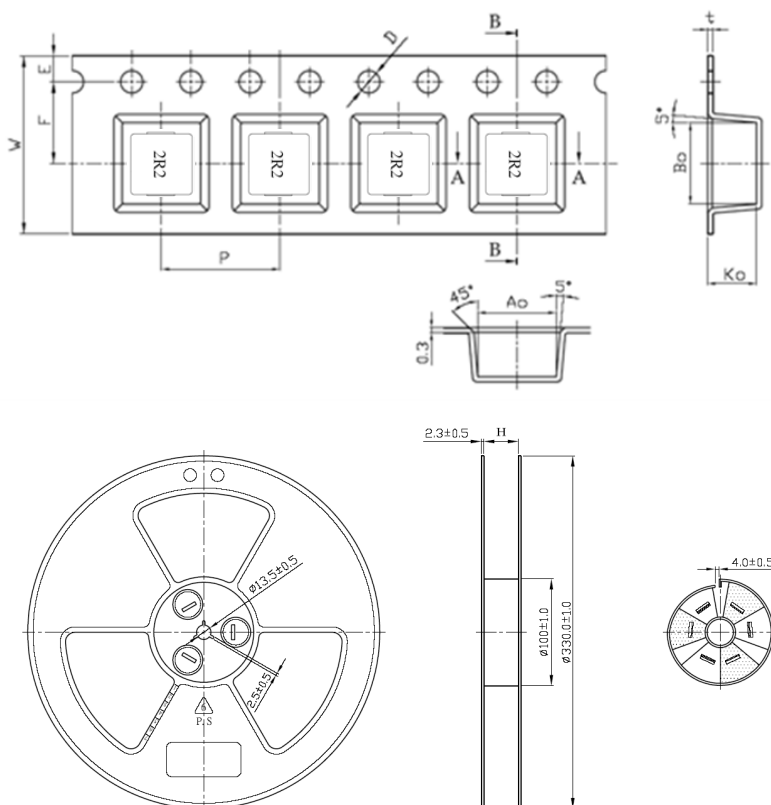
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TAPE & REEL:

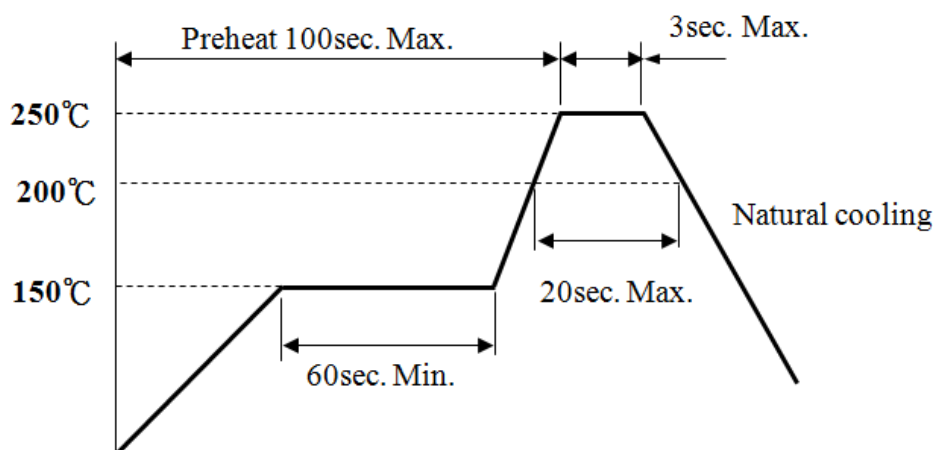
T1: 1,500pcs / reel



| | |
|----|------|
| A0 | 7.2 |
| B0 | 7.5 |
| K0 | 3.6 |
| P | 12.0 |
| t | 0.3 |
| W | 16 |
| E | 1.75 |
| F | 7.5 |
| D | 1.5 |

Dimension: mm

REFLOW PROFILE:



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ABRACON IS
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