## ASPI-0630HI





#### > 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 meeted 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**

| Abracon 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<br>Current | Temperature<br>Rise Current |
|-----------------|------------|-----------|---------|------------|-----------------------|-----------------------------|
| Units           | μH         | %         | mΩ      | m $\Omega$ | 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                         |

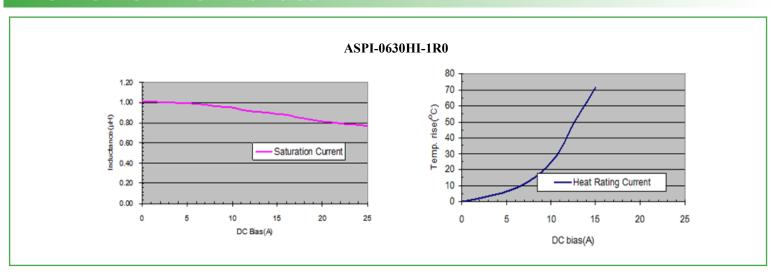
#### **Test Conditions**

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 ( $\Delta L/Lo : \le -20\%$ ) Irms: Based on temperature rise ( $\Delta T : 40^{\circ}C$  TYP.)

### **ELECTRICAL CHARACTERISTIC CU**





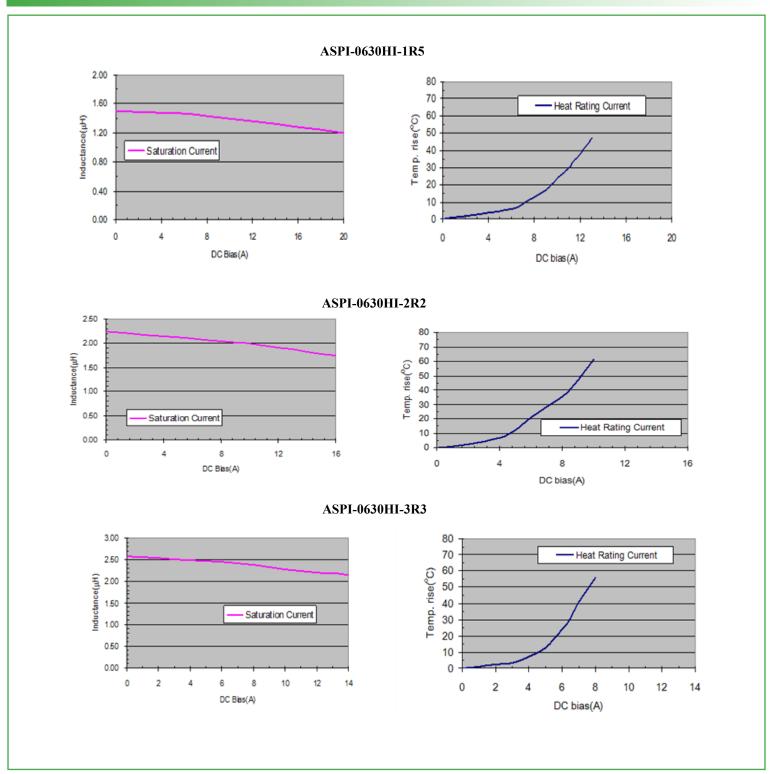


ASPI-0630HI





### ELECTRICAL CHARACTERISTIC CURVES



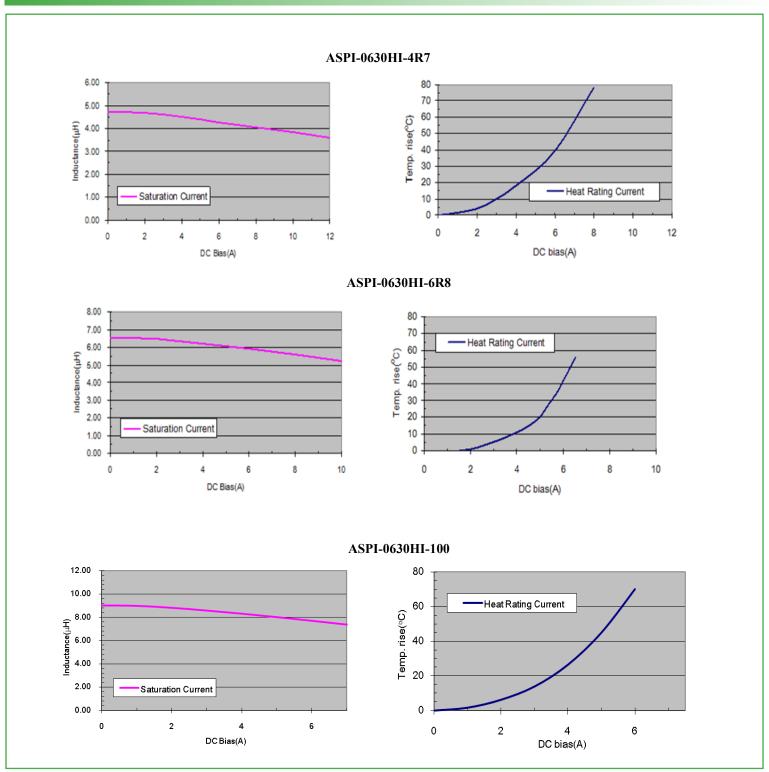


ASPI-0630HI





### ELECTRICAL CHARACTERISTIC CURVES



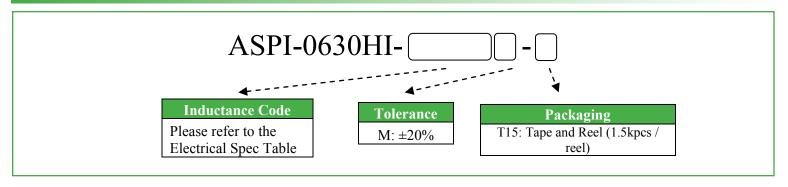


ASPI-0630HI

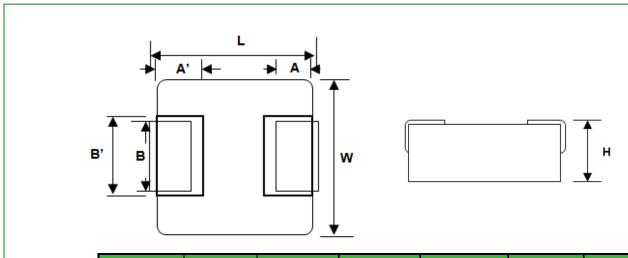




## PART NUMBER IDENTIFICATION

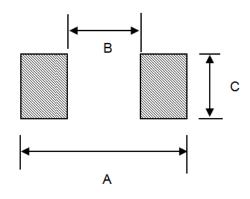


### **OUTLINE DRAWING:**



| A             | A'            | В             | В'            | L             | $\mathbf{W}$   | H max |
|---------------|---------------|---------------|---------------|---------------|----------------|-------|
| $1.6 \pm 0.4$ | $2.0 \pm 0.1$ | $3.0 \pm 0.3$ | $3.4 \pm 0.2$ | $7.2 \pm 0.3$ | $6.65 \pm 0.2$ | 3.0   |

#### **Recommended Land Pattern**



| A   | В   | С   |
|-----|-----|-----|
| 8.4 | 3.7 | 3.4 |

**Dimension: mm** 

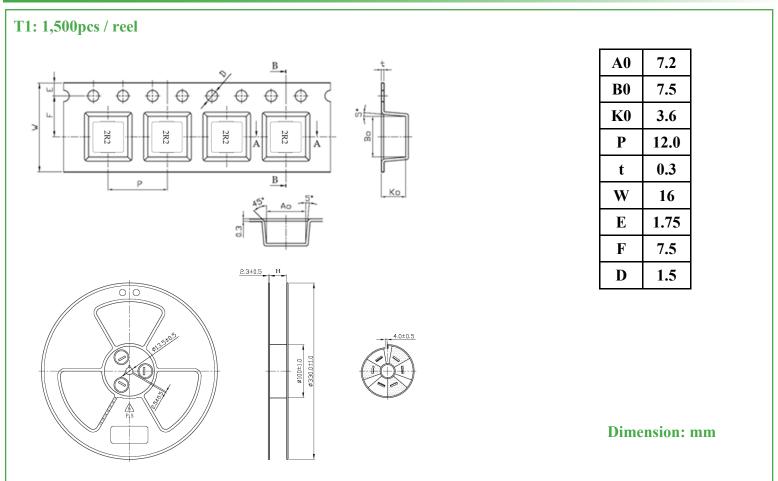


ASPI-0630HI

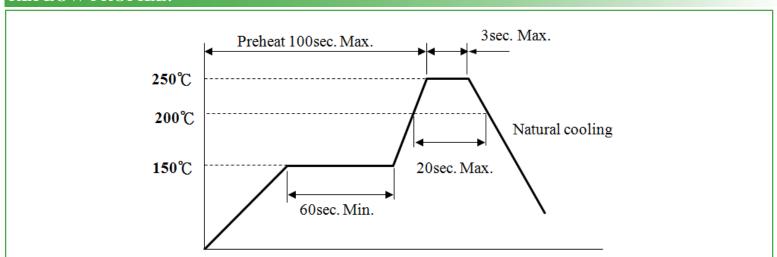




#### ► TAPE & REEL:



### **REFLOW PROFILE:**



**ATTENTION:** Abracon Corporation'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-dependant 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 Corporation is required. Please contact Abracon Corporation for more information.





## **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Fixed Inductors category:

Click to view products by ABRACON manufacturer:

Other Similar products are found below:

CR43NP-680KC CR54NP-820KC CR54NP-8R5MC CTX32CT-100 70F224AI MGDQ4-00004-P MHL1ECTTP18NJ MHL1JCTTD12NJ PE-51506NL PE-53601NL PE-53602NL PE-53630NL PE-53824SNLT PE-62892NL PE-92100NL PG0434.801NLT PG0936.113NLT 9310-16 PM06-2N7 PM06-39NJ A01TK 1206CS-471XJ HC2-2R2TR HC2LP-R47-R HC3-2R2-R HCF1305-3R3-R 1206CS-151XG RCH664NP-140L RCH664NP-4R7M RCH8011NP-221L RCP1317NP-332L RCP1317NP-391L RCR1010NP-470M RCR110DNP-331L DH2280-4R7M DS1608C-106 ASPI-4020HI-R10M-T B10TJ B82477P4333M B82498B3101J000 B82498B3680J000 ELJ-RE27NJF2 1812CS-153XJ 1812CS-183XJ 1812CS-223XJ 1812LS-104XJ 1812LS-105XJ 1812LS-124XJ 1812LS-154XJ 1812LS-223XJ