ASPI-1040HI





> FEATURES:

- High saturation current.
- Low loss due to low DC resistance.
- Frequency application up to 3MHz.
- Low profile with max thickness 4.0mm.
- •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-1040HI 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 | μН | % | m Ω | m Ω | A | A |
| Symbol | L | M | | | Isat* | Irms* |
| ASPI-1040HI-R16 | 0.16 | M | 0.50 | 0.65 | 75.0 | 40.0 |
| ASPI-1040HI-R22 | 0.22 | M | 0.88 | 0.96 | 68.0 | 35.0 |
| ASPI-1040HI-R47 | 0.47 | M | 1.55 | 1.70 | 40.0 | 30.0 |
| ASPI-1040HI-1R0 | 1.00 | M | 3.00 | 3.30 | 28.0 | 18.0 |
| ASPI-1040HI-4R7 | 4.70 | M | 17.00 | 20.20 | 15.0 | 8.5 |
| ASPI-1040HI-100 | 10.00 | M | 27.00 | 30.00 | 8.5 | 7.5 |

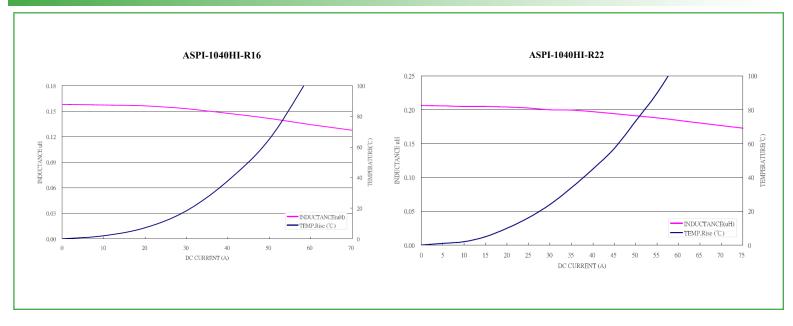
Test Conditions

Inductance is measured in HP-4284A Precision LCR Meter.

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

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

ELECTRICAL CHARACTERISTIC CURVES





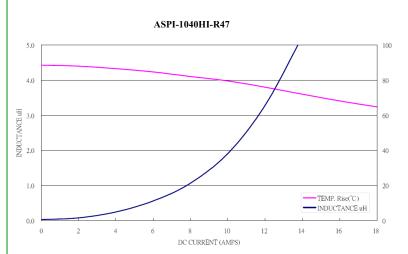


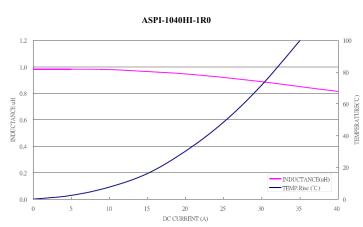
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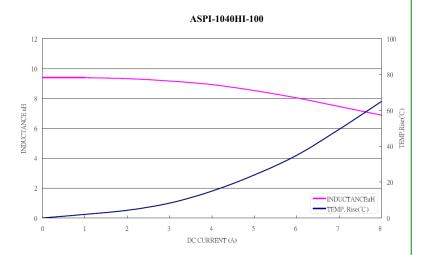


ELECTRICAL CHARACTERISTIC CURVES





ASPI-0630HI-4R7 5.0 80 4.0 INDUCTANCE uH 3.0 60 40 TEMP. Rise(°C) INDUCTANCE uH DC CURRENT (AMPS)





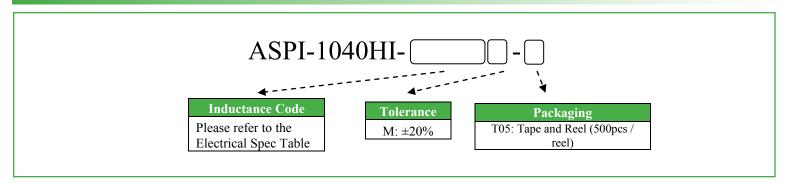


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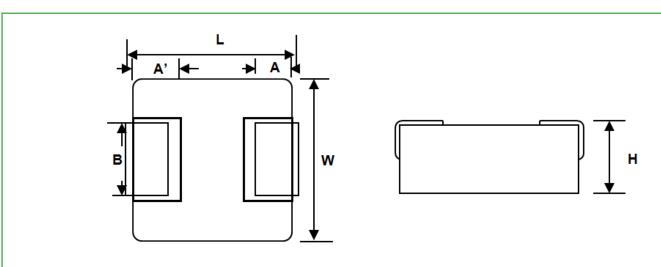




PART NUMBER IDENTIFICATION

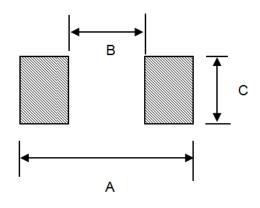


OUTLINE DRAWING:



| A | A' | В | L | \mathbf{W} | Н |
|---------------|---------------|---------------|------------------|--------------|---|
| 2.0 ± 0.5 | 2.5 ± 0.1 | 3.0 ± 0.5 | 11.15 ± 0.35 | 10 ± 0.3 | $4 \max (4.0 \pm 0.25 \text{ for R16})$ |

Recommended Land Pattern



| A | В | C |
|------|-----|-----|
| 13.6 | 5.4 | 4.1 |

Dimension: mm



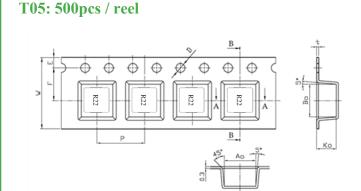


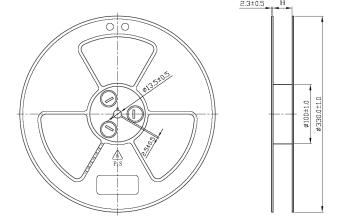
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> TAPE & REEL:



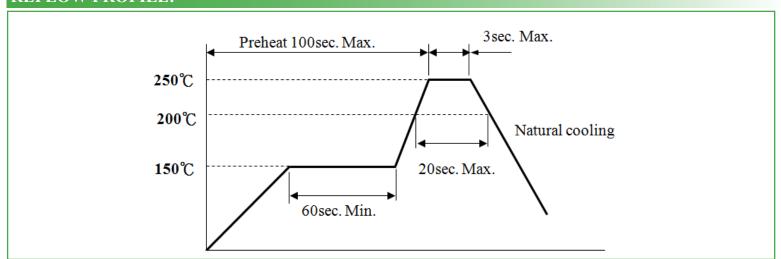




| A0 | 10.5 |
|-----------|------|
| B0 | 11.5 |
| K0 | 4.2 |
| P | 16.0 |
| t | 0.5 |
| W | 24 |
| E | 1.75 |
| F | 11.5 |
| D | 1.5 |

Dimension: mm

REFLOW PROFILE:



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