

# Molding Type Power Inductor

ASPI-0520LR



RoHS  
Compliant



5.6 x 5.2 x 2.0 mm

## FEATURES:

- High saturation current.
- Low loss due to low DC resistance.
- Frequency application up to 3MHz.
- Low profile with max thickness 2.0mm.
- 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-0520LR 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-0520LR-1R0 | 1.0        | M         | 16.8    | 18.5    | 8.0                | 7.5                      |
| ASPI-0520LR-2R2 | 2.2        | M         | 33.0    | 36.0    | 5.0                | 5.5                      |
| ASPI-0520LR-3R3 | 3.3        | M         | 45.0    | 50.0    | 4.2                | 4.5                      |
| ASPI-0520LR-4R7 | 4.7        | M         | 52.0    | 58.0    | 3.7                | 3.7                      |
| ASPI-0520LR-5R6 | 5.6        | M         | 65.0    | 75.0    | 3.3                | 3.5                      |

## Test Conditions

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

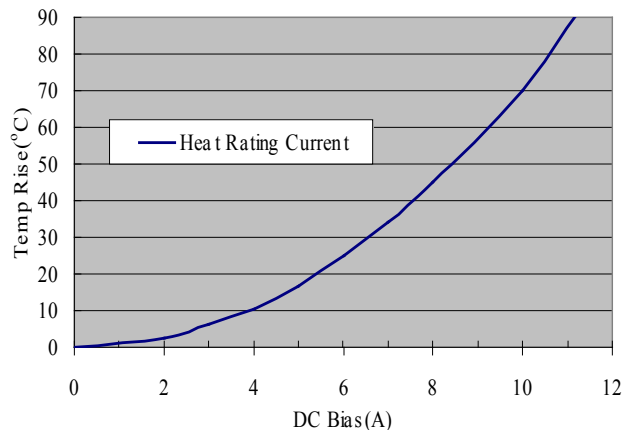
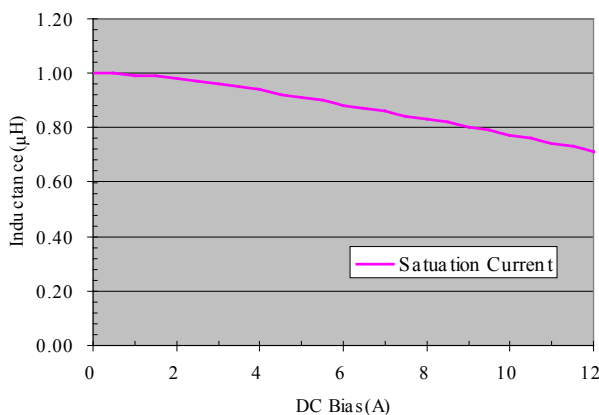
RDC is measured in HP-4338B milli ohm meter.(or equivalent).

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 CURVES

ASPI-0520LR-1R0



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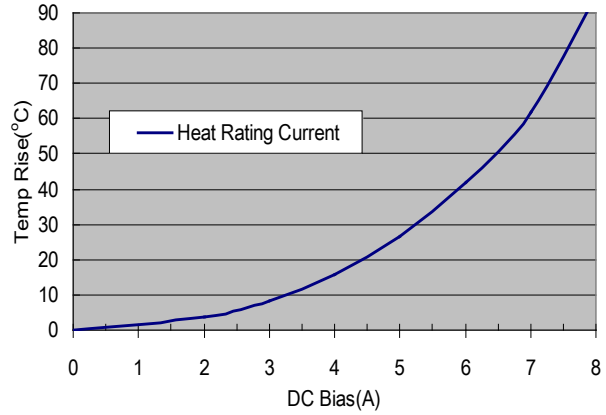
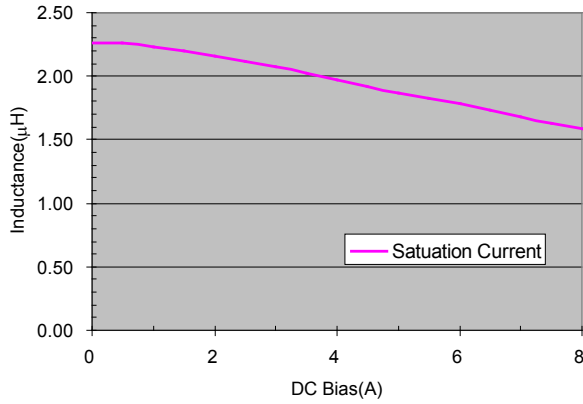
RoHS  
Compliant



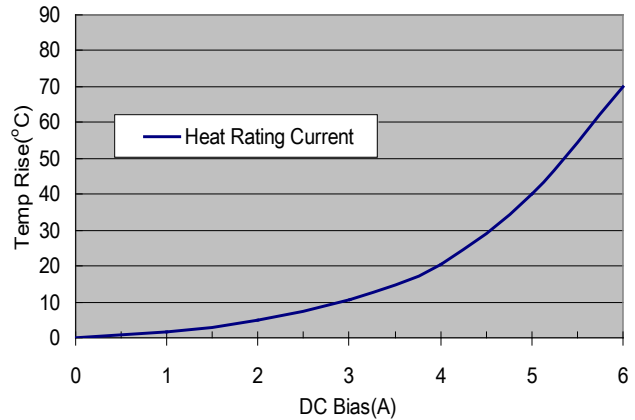
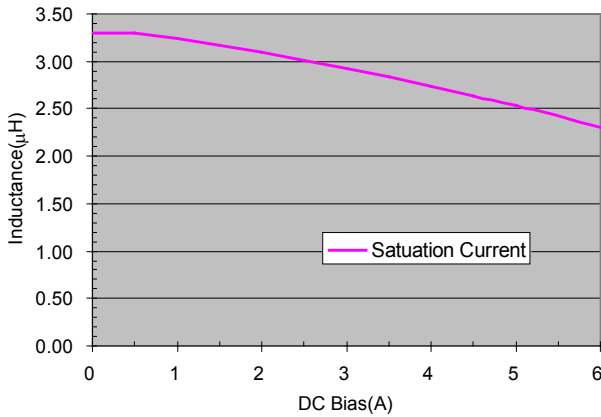
5.6 x 5.2 x 2.0 mm

## ELECTRICAL CHARACTERISTIC CURVES

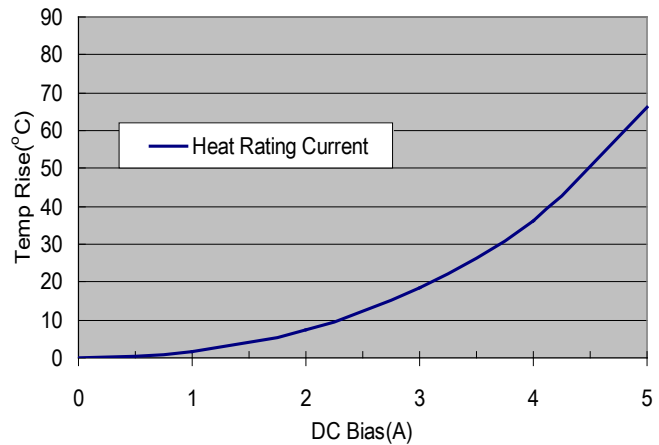
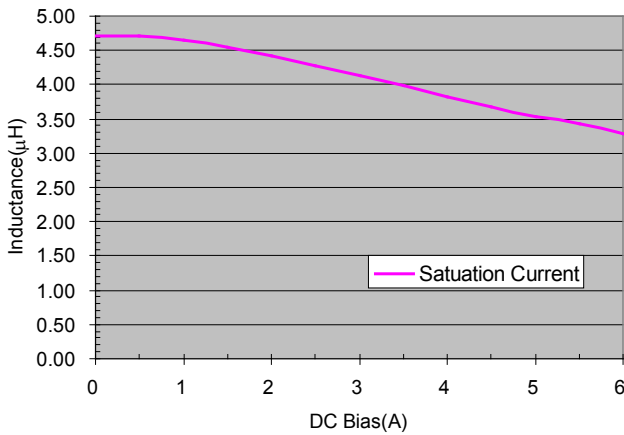
ASPI-0520LR-2R2



ASPI-0520LR-3R3



ASPI-0520LR-4R7



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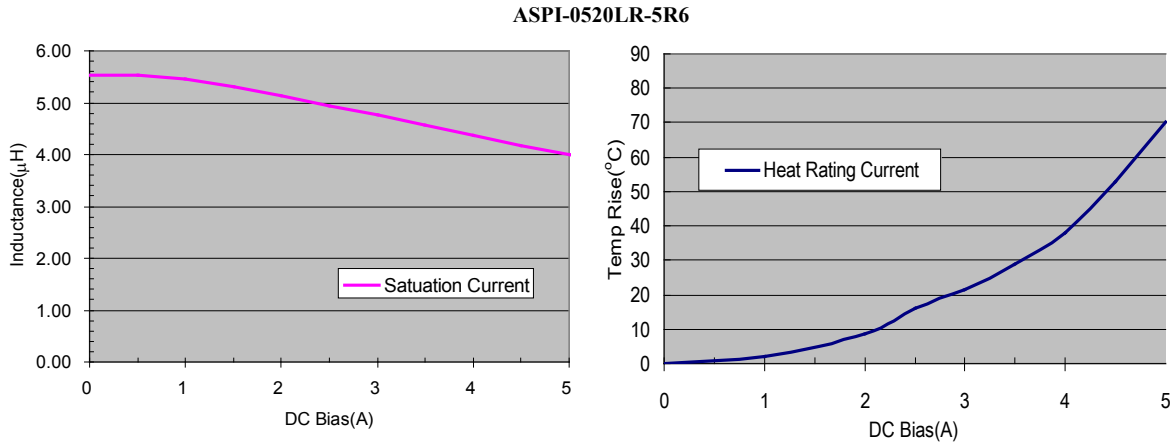


RoHS  
Compliant



5.6 x 5.2 x 2.0 mm

## ELECTRICAL CHARACTERISTIC CURVES



## PART NUMBER IDENTIFICATION

ASPI-0520LR-     -  

**Inductance Code**

Please refer to the Electrical Spec Table

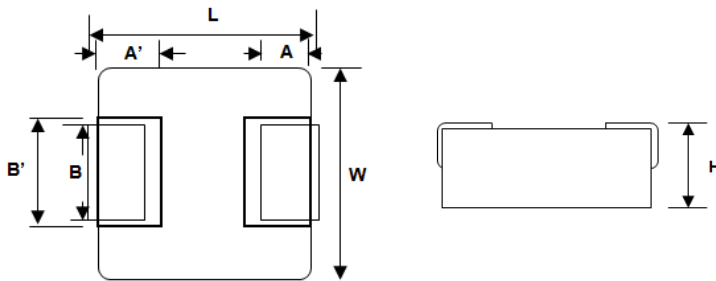
**Tolerance**

M: ±20%

**Packaging**

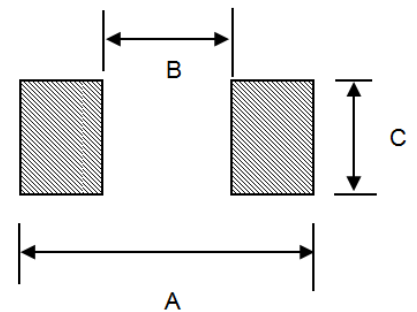
T2: Tape and Reel (2kpcs / reel)

## OUTLINE DRAWING:



| A        | A'       | B        | B'       | L          | W        | H        |
|----------|----------|----------|----------|------------|----------|----------|
| 1.0 ±0.4 | 1.5 ±0.1 | 2.0 ±0.3 | 2.5 ±0.2 | 5.60 ±0.35 | 5.2 ±0.2 | 2.0 ±0.1 |

## Recommended Land Pattern



| A    | B   | C   |
|------|-----|-----|
| 5.99 | 2.2 | 2.5 |

Dimension: mm

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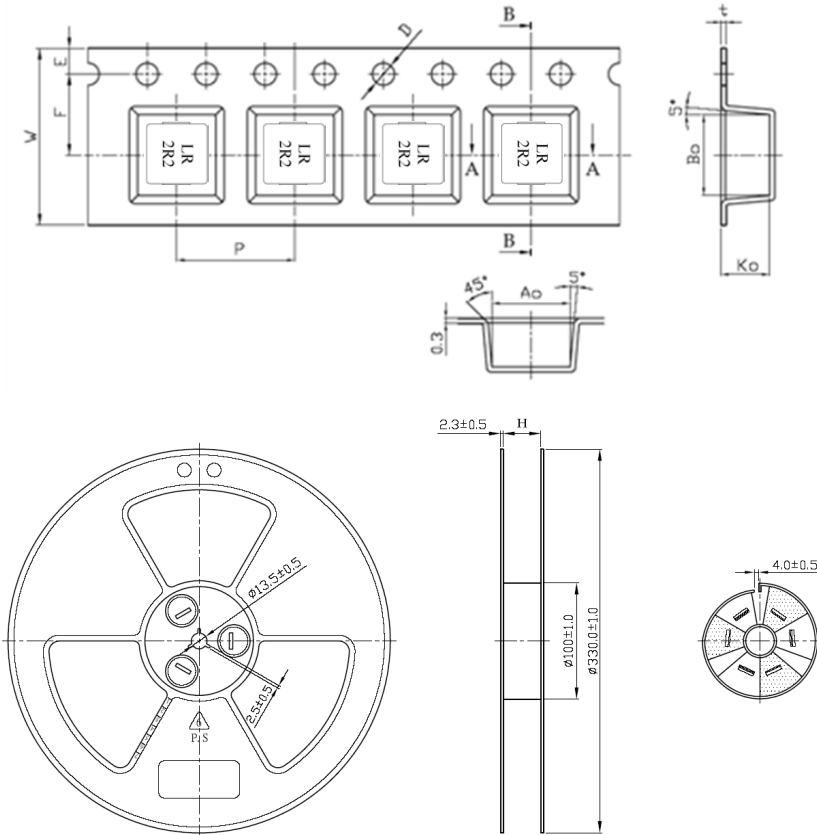
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## TAPE & REEL:

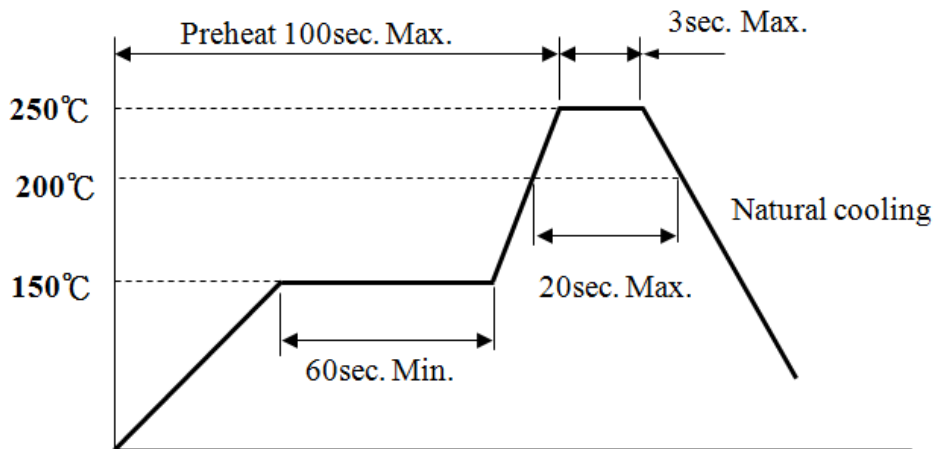
T2: 2,000pcs / reel



|    |      |
|----|------|
| A0 | 5.3  |
| B0 | 5.5  |
| K0 | 3.3  |
| P  | 8.0  |
| t  | 0.4  |
| W  | 12   |
| E  | 1.75 |
| F  | 5.5  |
| D  | 1.5  |

Dimension: mm

## REFLOW PROFILE:



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