# HIGH CURRENT SHIELDED INDUCTOR

**ASPI-7318** 





## > FEATURES:

- 100%lead (Pb) free.
- Lowest DCR/uH, in this package size.
- Frequency range up to 5.0MHz
- Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction.

### **► APPLICATIONS:**

- Notebook/Desktop/Server applications.
- Low profile, high current power supplies.
- Battery powered devices.
- DC/DC converter for Field Programmable
- Gate Array(FPGA)

## **ELECTRICAL SPECIFICATIONS:**

| Abracon P/N:            | ASPI-7318-xxx                   |
|-------------------------|---------------------------------|
| Operating Temperature : | -55°C to +125°C                 |
| Storage Temperature     | Under +25°C, Humidity <75% R.H. |

| Part Number | L    | Tolerance | Test Freq.    | $R_{DC}$ | HEAT RATING DC CURRENT | S ATUR ATION<br>DC CURRENT |
|-------------|------|-----------|---------------|----------|------------------------|----------------------------|
| ASP I-7318- | (μΗ) | %         | (MHz)         | mΩ Max   | (A) Typ.               | (A) Typ.                   |
| R22N        | 0.22 | N         | 200kHz,0.25V  | 3.1      | 22                     | 34                         |
| R33 M       | 0.33 | M         | 200kHz,0.25V  | 3.9      | 20                     | 28                         |
| R47M        | 0.47 | M         | 200kHz,0.25V  | 4.2      | 17.5                   | 24                         |
| R56M        | 0.56 | M         | 200kHz,0.25V  | 5.3      | 15.5                   | 23                         |
| R68M        | 0.68 | M         | 200kHz,0.25V  | 5.5      | 15.5                   | 22                         |
| R82 M       | 0.82 | M         | 200kHz,0.25V  | 8.0      | 13                     | 19                         |
| 1R0M        | 1.0  | M         | 200kHz,0.25V  | 10.0     | 11                     | 17                         |
| 1R5M        | 1.5  | M         | 200kHz,0.25V  | 15       | 9                      | 15                         |
| 2R2M        | 2.2  | M         | 200kHz,0.25V  | 20       | 8                      | 12                         |
| 2R5M        | 2.5  | M         | 200kHz,0.25V  | 22       | 8                      | 11                         |
| 3R3M        | 3.3  | M         | 200kHz,0.25V  | 30       | 6                      | 10                         |
| 4R7M        | 4.7  | M         | 200kHz,0.25V  | 40       | 5                      | 8                          |
| 5R6M        | 5.6  | M         | 200kHz,0.25V  | 54       | 5                      | 7.5                        |
| 6R8M        | 6.8  | M         | 200kHz,0.25 V | 60       | 4.5                    | 7                          |
| 8R2M        | 8.2  | M         | 200kHz,0.25V  | 68       | 4                      | 6                          |
| 100 M       | 10.0 | M         | 200kHz,0.25V  | 105      | 3                      | 5.5                        |
| 220 M       | 22.0 | M         | 200kHz,0.25V  | 230      | 2                      | 3                          |

Test condition

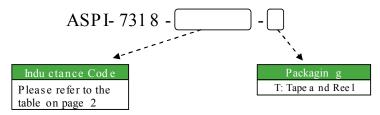
|   | 1 est condition |               |  |  |  |
|---|-----------------|---------------|--|--|--|
|   | Temperature     | 25°C          |  |  |  |
| Γ | Humidity        | 60 to 70 % RH |  |  |  |

Note: Tolerance M = $\pm 20\%$ ; N= $\pm 30\%$   $\Delta T$  of 40°C.

- 1. HEAT RATING DC current (A) that will cause an approximate
- 2. SATURATION DC current (A) that will cause Lo to drop approximately 20%
- 3. Operating Temperature Range 55°C to + 125°C
- 4. The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions.

  Circuit design 125°C under worst case operating conditions. component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

#### > OPTIONS AND PART IDENTIFICATION







Visit www.abracon.com for Terms & Conditions of Sale **Revised: 02.26.11** 30332 Esperanza, Rancho Santa Margarita, California 92688 tel 949-546-800 | fax 949-546-801 | www.abracon.com

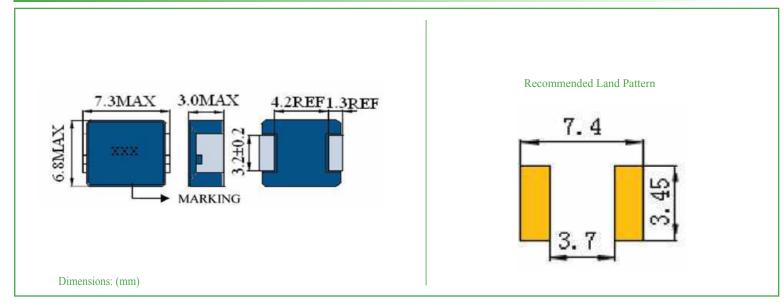
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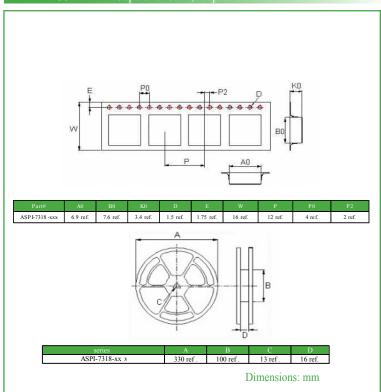


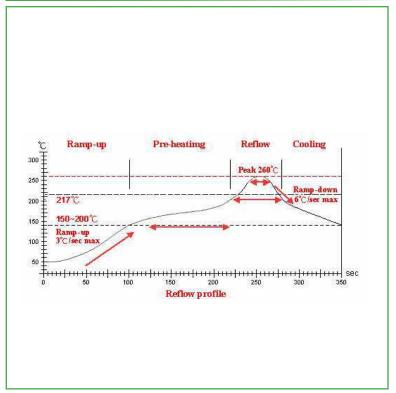
### DOUTLINE DRAWING:



## TAPE & REELTape and reel 1,000pcs/reel

## REFLOW PROFILE:





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