

# HIGH CURRENT SHIELDED INDUCTOR



7.3 x 6.8 x 3.0mm

**ASPI-7318**



**RoHS**  
Compliant

## 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:

Abrakon 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 <sub>DC</sub>	HEAT RATING DC CURRENT	SATURATION DC CURRENT
ASPI-7318-	(μH)	%	(MHz)	mΩ Max	(A) Typ.	(A) Typ.
R22N	0.22	N	200kHz,0.25V	3.1	22	34
R33M	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
R82M	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,0.25V	60	4.5	7
8R2M	8.2	M	200kHz,0.25V	68	4	6
100M	10.0	M	200kHz,0.25V	105	3	5.5
220M	22.0	M	200kHz,0.25V	230	2	3

### Test condition

Temperature	25°C
Humidity	60 to 70 % RH

Note: Tolerance M =±20%; N=±30% ΔT of 40°C.

1. HEAT RATING DC current (A) that will cause an approximate
2. SATURATION DC current (A) that will cause L<sub>o</sub> 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

ASPI- 7318 - [ ] - [ ]

**Inductance Code**  
Please refer to the table on page 2

**Packaging**  
T: Tape and Reel



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# HIGH CURRENT SHIELDED INDUCTOR

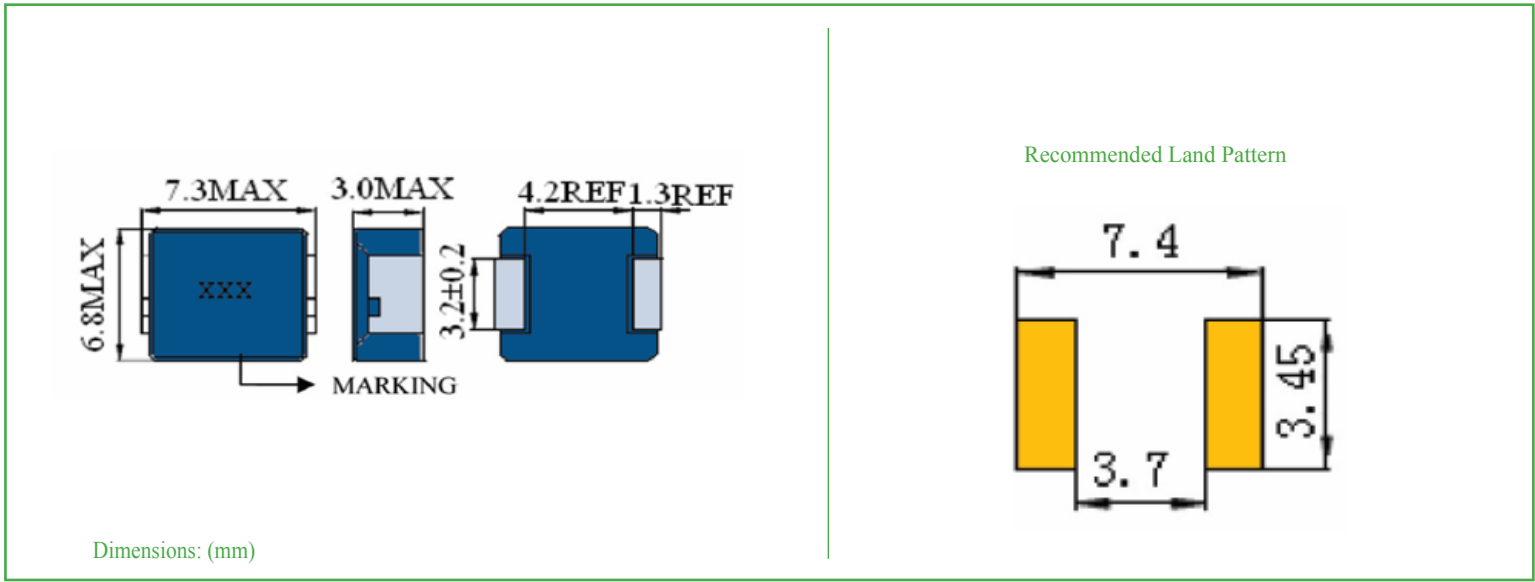


7.3 x 6.8 x 3.0mm

ASPI-7318

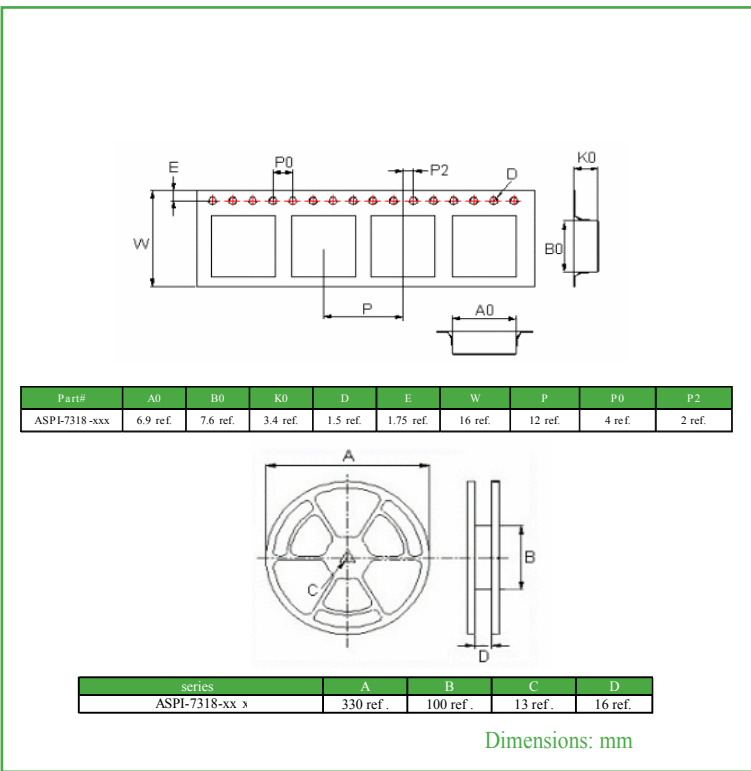
**Pb** RoHS Compliant

## OUTLINE DRAWING:



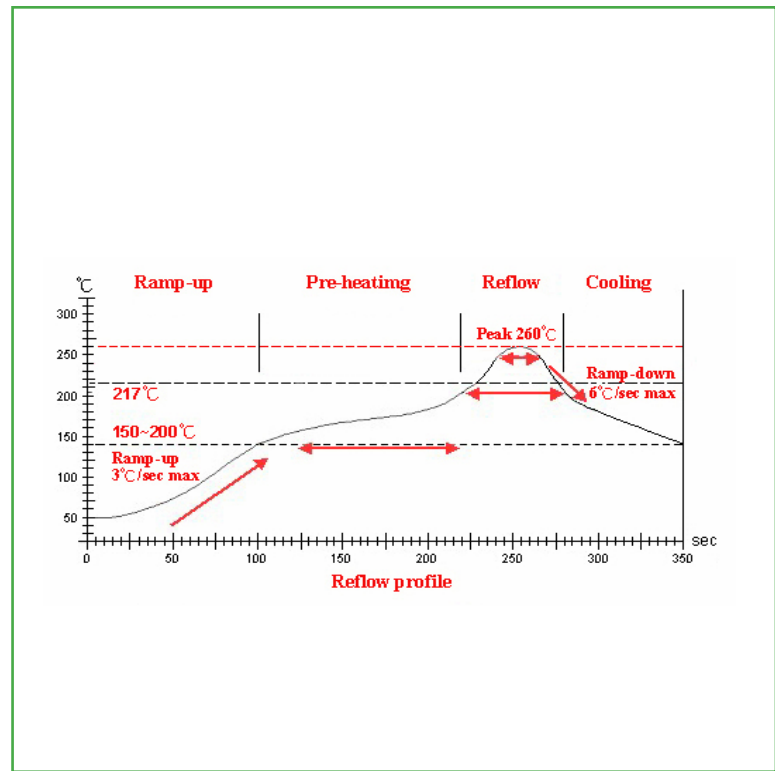
Dimensions: (mm)

## TAPE & REEL



Dimensions: mm

## REFLOW PROFILE:



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