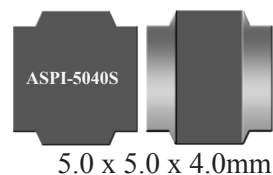


# Low Profile Shielded SMD Chip Power Inductor



ASPI-5040S



RoHS  
Compliant

5.0 x 5.0 x 4.0mm

## FEATURES:

- Magnetically shielded for low radiation
- Large Terminal surface for good PCB mounting
- Low DCR and high rated current
- Suitable for DC-DC converter applications

## APPLICATIONS:

- Portable communication equipment
- OA equipment
- LCD, DVD, modem, set-top box
- DC/DC converters

## ELECTRICAL SPECIFICATIONS:

Part Number	Inductance	Tolerance	DCR Max	DCR Typ	Current Max	Temperature Rise Current Max
Units	$\mu\text{H}$	%	$\text{m}\Omega$	$\text{m}\Omega$	A	A
Symbol	L	M= $\pm 20\%$ , N= $\pm 30\%$	DCR	DCR	Isat	Irms
ASPI-5040S-1R5	1.5	N	24	20	6.00	3.60
ASPI-5040S-2R2	2.2	N	26	22	4.60	3.50
ASPI-5040S-3R3	3.3	N	32	27	3.80	3.30
ASPI-5040S-4R7	4.7	N	35	29	3.30	3.10
ASPI-5040S-6R8	6.8	M	59	49	2.60	2.30
ASPI-5040S-100	10	M	67	56	2.30	2.10
ASPI-5040S-150	15	M	96	80	2.00	1.80
ASPI-5040S-220	22	M	151	126	1.60	1.40
ASPI-5040S-330	33	M	216	180	1.30	1.20
ASPI-5040S-470	47	M	372	310	1.10	0.90

### Test Criteria:

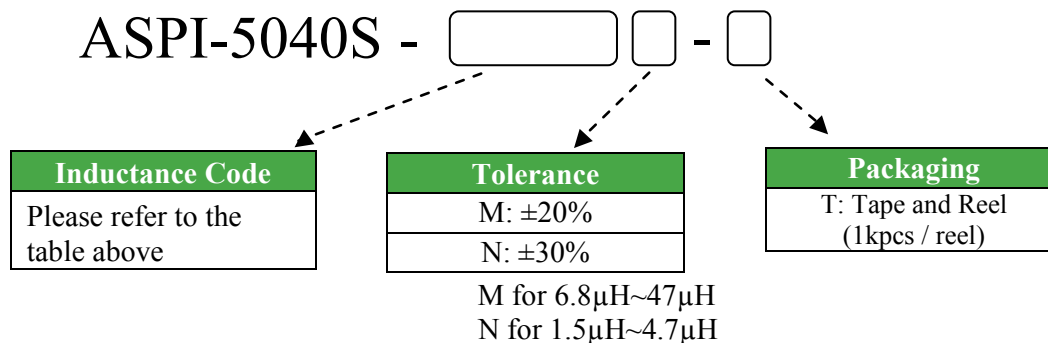
Inductance: 100kHz, 1V

Isat: Based on inductance change ( $\Delta L/L_0 : \leq 30\%$ )

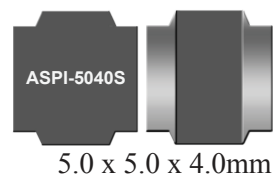
Irms: Based on temperature rise ( $\Delta T : 40^\circ\text{C TYP.}$ )

Storage Temperature	$-10^\circ\text{C} \sim 40^\circ\text{C}$ .
Operating Temperature	$-25^\circ\text{C} \sim 120^\circ\text{C}$ .

## OPTIONS AND PART IDENTIFICATION



# Low Profile Shielded SMD Chip Power Inductor

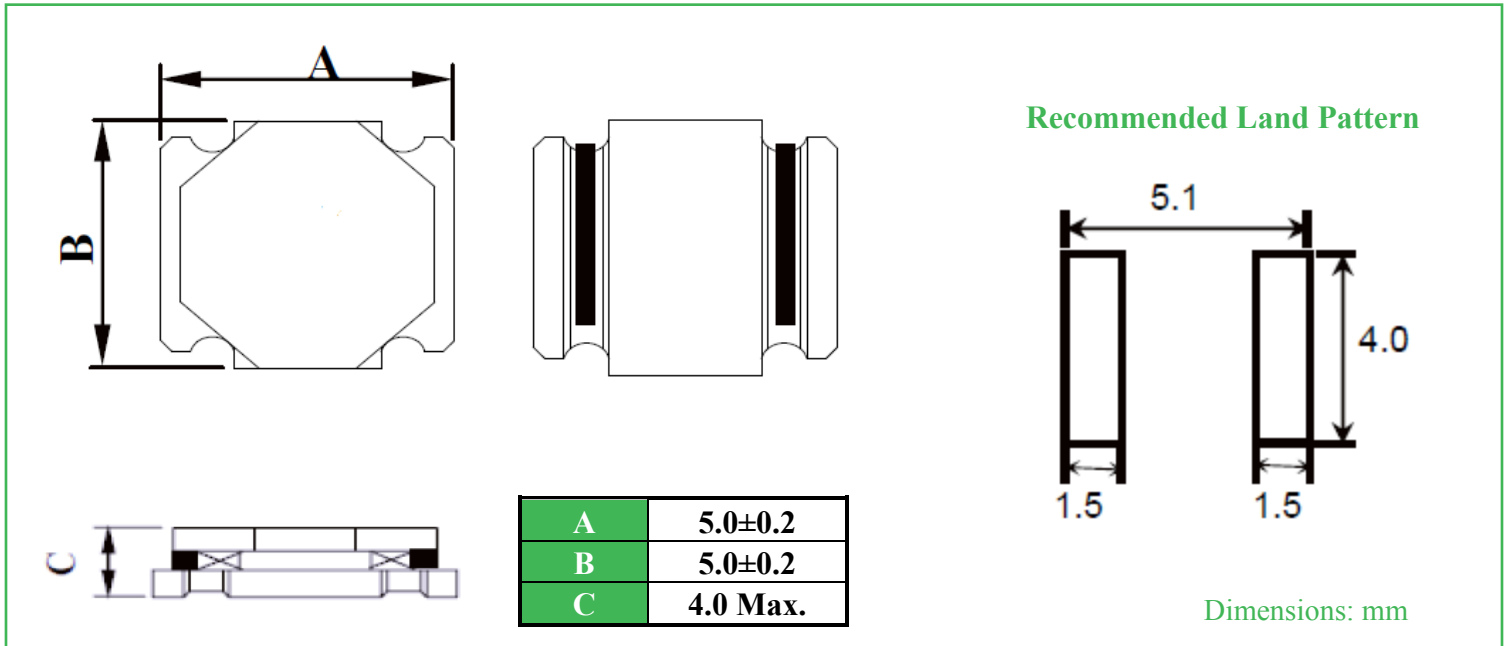


ASPI-5040S

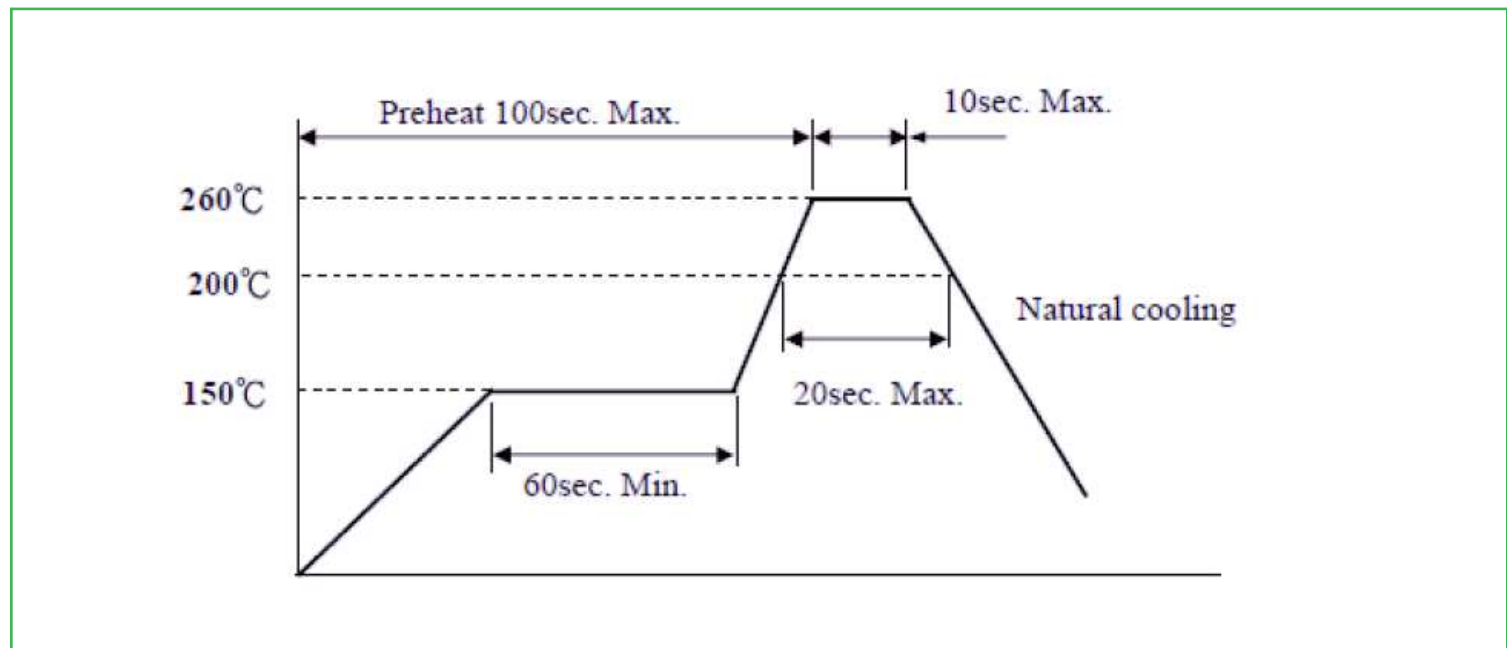


RoHS  
Compliant

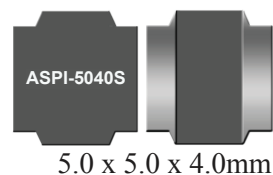
## OUTLINE DRAWING:



## REFLOW PROFILE



# Low Profile Shielded SMD Chip Power Inductor

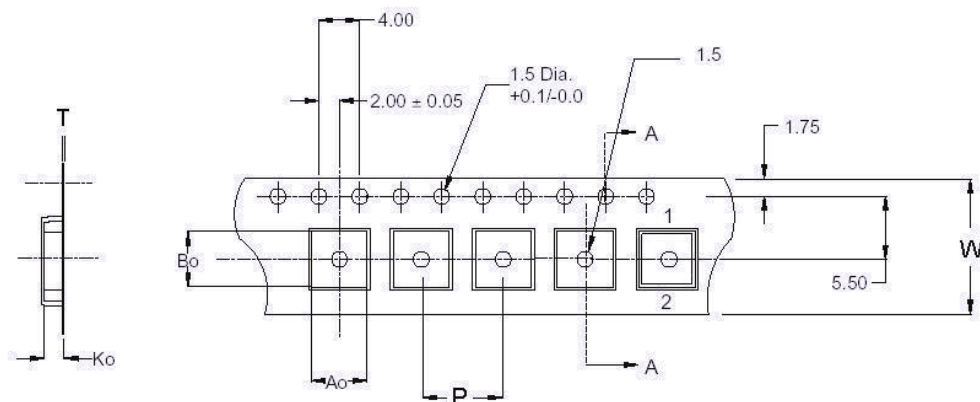


ASPI-5040S

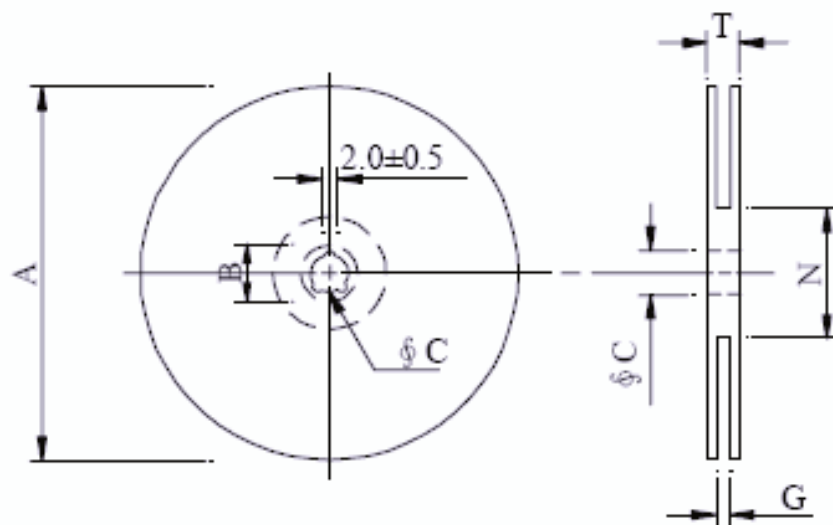


RoHS  
Compliant

TAPE & REEL: T: 1000pcs/reel

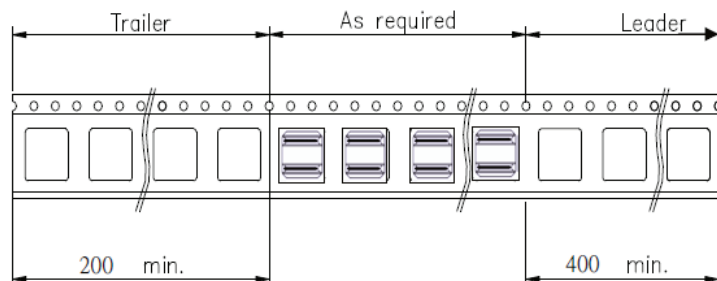


<b>Ao</b>	<b>5.40</b>
<b>Bo</b>	<b>5.40</b>
<b>Ko</b>	<b>4.75</b>
<b>W</b>	<b>16.00</b>
<b>P</b>	<b>12.00</b>
<b>T</b>	<b>0.35</b>



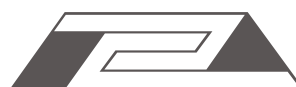
<b>A</b>	<b>330</b>
<b>B</b>	<b>21.0±0.8</b>
<b>C</b>	<b>13.5±0.5</b>
<b>G</b>	<b>16.8</b>
<b>N</b>	<b>99.5</b>
<b>T</b>	<b>21.0</b>

Unreeling  
g



Dimensions: mm

**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.



**ABRACON  
CORPORATION**

Visit [www.abracon.com](http://www.abracon.com) for Terms & Conditions of Sale **Revised: 01.24.12**  
30332 Esperanza, Rancho Santa Margarita, California 92688  
tel 949-546-8000 | fax 949-546-8001 | [www.abracon.com](http://www.abracon.com)