

# SMD SHIELDED POWER INDUCTOR

## ASPI-0704S



RoHS  
Compliant



7.3 x 7.3 x 4.5mm

### FEATURES:

- Superior to be high saturation for surface mounting
- Low resistance to keep power loss minimum
- Magnetic shielded for low radiation
- Compact size
- Ferrite bobbin core

### APPLICATIONS:

- Desktop, notebook, servers
- Network hubs, bridges, routers
- XDSL, PBX base stations
- GPS system
- Digital TV, DVD, Modem, setup box
- Battery charger
- Electronic game devices

### STANDARD SPECIFICATIONS:

Operating temperature:	-40°C to +125°C (including self-generated heat)
Storage temperature:	+15°C to +28°C
Operating Voltage (maximum):	Voltage across inductor: 400V

Part Number	Inductance	DC Resistance	IDC	Marking
	( $\mu$ H)	( $\Omega$ )	(A)	
ASPI-0704S-1R0M	1.0	0.020	8.00	1R0
ASPI-0704S-1R5M	1.5	0.018	7.00	1R5
ASPI-0704S-2R2M	2.2	0.028	6.00	2R2
ASPI-0704S-3R3M	3.3	0.032	4.80	3R3
ASPI-0704S-3R9M	3.9	0.035	4.40	3R9
ASPI-0704S-4R7M	4.7	0.038	4.00	4R7
ASPI-0704S-5R6M	5.6	0.040	3.5	5R6
ASPI-0704S-6R8M	6.8	0.045	3.00	6R8
ASPI-0704S-100M	10	0.049	1.84	100
ASPI-0704S-120M	12	0.058	1.71	120
ASPI-0704S-150M	15	0.081	1.47	150
ASPI-0704S-180M	18	0.091	1.31	180
ASPI-0704S-220M	22	0.110	1.23	220
ASPI-0704S-270M	27	0.150	1.12	270
ASPI-0704S-330M	33	0.170	0.96	330
ASPI-0704S-390M	39	0.230	0.91	390
ASPI-0704S-470M	47	0.260	0.88	470
ASPI-0704S-560M	56	0.350	0.75	560
ASPI-0704S-680M	68	0.380	0.69	680
ASPI-0704S-820M	82	0.430	0.61	820
ASPI-0704S-101M	100	0.610	0.60	101
ASPI-0704S-121M	120	0.660	0.52	121
ASPI-0704S-151M	150	0.880	0.46	151
ASPI-0704S-181M	180	0.980	0.42	181
ASPI-0704S-221M	220	1.170	0.36	221
ASPI-0704S-271M	270	1.640	0.34	271
ASPI-0704S-331M	330	1.860	0.32	331
ASPI-0704S-391M	390	2.850	0.29	391
ASPI-0704S-471M	470	3.010	0.26	471
ASPI-0704S-561M	560	3.620	0.23	561
ASPI-0704S-681M	680	4.630	0.22	681
ASPI-0704S-821M	820	5.200	0.20	821
ASPI-0704S-102M	1000	6.000	0.18	102

### Test Conditions and Equipment

1. Frequency: 1KHz, 0.25V
2. Rated DC Current: The DC current at which the inductance becomes 25% lower than its initial value or when  $\Delta t = 40^\circ\text{C}$ , whichever is lower. ( $T_a = 25^\circ\text{C}$ )
3. L: HP4284A or HP4285A LCR meter
4. DCR: Milli-ohm meter

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## ➤ PART NUMBER IDENTIFICATION:

(Left Blank if Standard)

ASPI-0704S-  -

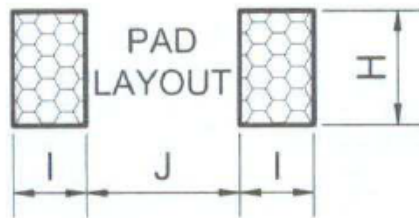
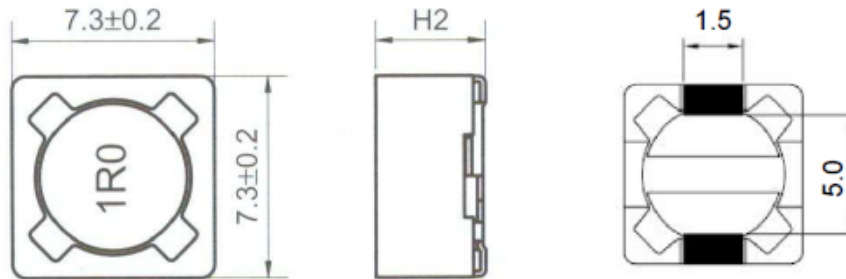
**Inductance Code**

Please refer to the table above

**Packaging**

T: Tape and Reel  
(1kpcs / reel)

## ➤ OUTLINE DRAWING:



H2	H	I	J
4.5 max	2.2	1.6	4.8

Dimensions: mm

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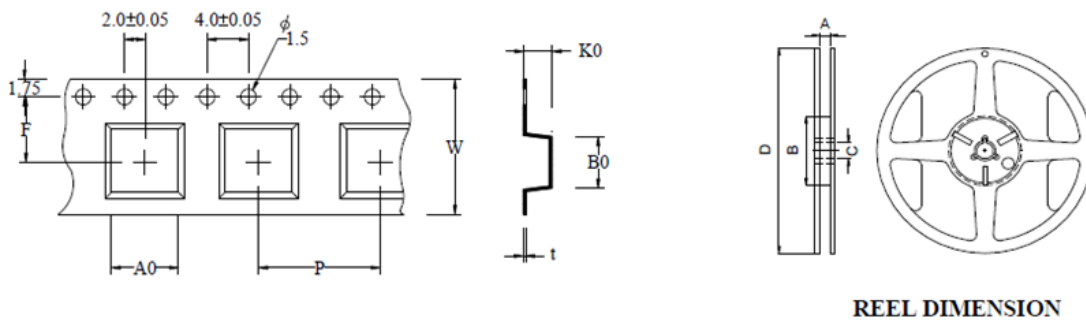
7.3 x 7.3 x 4.5mm

## TAPE AND REEL:

Tape and reel (1,000pcs/reel)

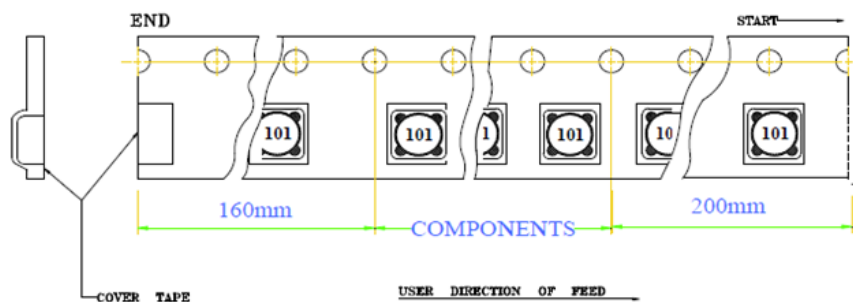
DIMENSIONS / SIZE (mm)			PATTERN / SIZE (mm)		
A	B	C	D	E	F
7.3 ± 0.2	7.3 ± 0.2	4.50 Max.	1.6	4.8	2.2

### • TAPE DIMENSION & REEL DIMENSION



TYPE	TAPE / SIZE (mm)							REEL 13"×16mm			
	Ao	Bo	Ko	P	F	W	t	A	B	C	D
0704	7.7 ± 0.1	7.7 ± 0.1	4.7 ± 0.1	12.0 ± 0.1	7.5 ± 0.1	16 ± 0.3	0.35 ± 0.05	16.5 ± 0.2	100 ± 0.5	13.2 ± 0.3	330 ± 1.0

### • PACKAGING QUANTITY



Dimension: mm

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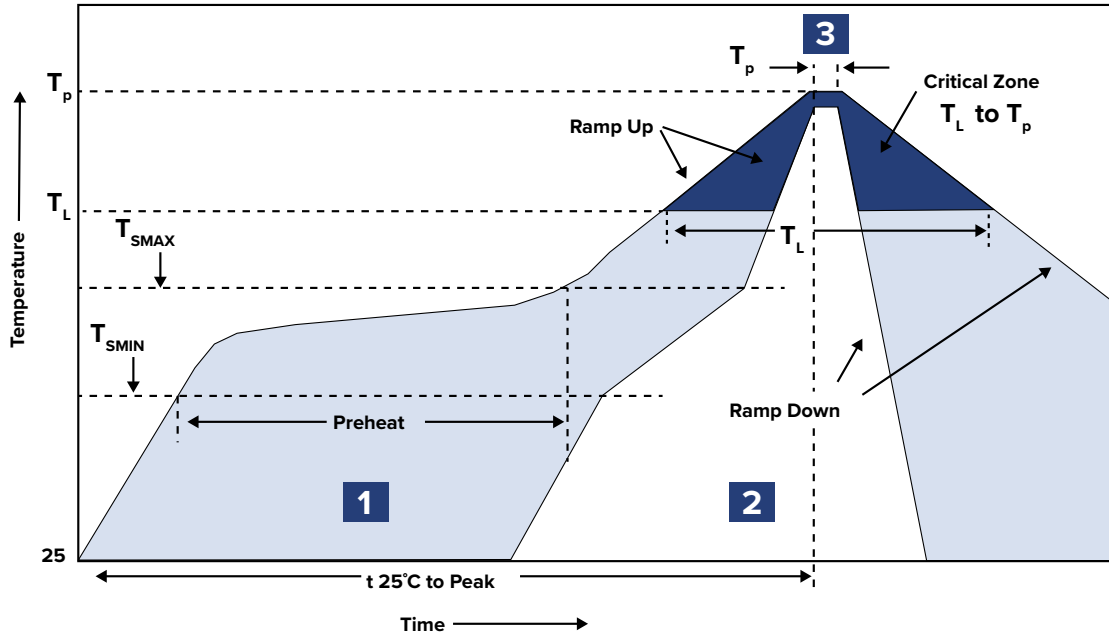


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## REFLOW PROFILE:



Zone	Description	Temperature	Time
1	Preheat / Soak	$T_{SMAX}$ 150°C ~ 180°C	60 ~ 120 sec.
2	Reflow	$T_L$ 230°C	30 ~ 40 sec.
3	Peak heat	$T_P$ 255°C ~ 265°C	10 sec. MAX

**ATTENTION:** Abracon LLC'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-dependent 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 LLC is required. Please contact Abracon LLC for more information.