

SMD SHIELDED POWER INDUCTOR

ASPI-1306S



RoHS
Compliant



18.5 x 15.2 x 7.6 mm

FEATURES:

- Low radiation shielded architecture
- Large pads for good PCB mounting
- Low DCR, suitable for large currents
- High Energy storage

APPLICATIONS:

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

ELECTRICAL SPECIFICATIONS:

Abrakon P/N:	ASPI-1306S
Operating Temperature:	-40°C to +125°C (including self-generated heat)
Storage Temperature:	-40°C to +125°C

PART NUMBER	INDUCTANCE (μ H) $\pm 20\%$	DCR(Ω) max	Isat (A) max	Irms (A) max	Q	SRF (MHz) Ref.
ASPI-1306S-100M	10	0.040	8.00	3.90	30.0	8.0
ASPI-1306S-150M	15	0.048	7.00	3.40	20.0	7.0
ASPI-1306S-220M	22	0.059	6.00	3.10	18.0	6.0
ASPI-1306S-330M	33	0.075	5.00	2.80	14.0	5.0
ASPI-1306S-470M	47	0.097	4.00	2.40	10.0	4.0
ASPI-1306S-680M	68	0.138	3.00	2.00	9.0	3.0
ASPI-1306S-101M	100	0.207	2.40	1.70	7.0	2.4
ASPI-1306S-151M	150	0.293	2.10	1.30	6.0	2.1
ASPI-1306S-221M	220	0.470	1.90	1.10	5.0	1.9
ASPI-1306S-331M	330	0.780	1.10	0.86	4.0	1.1
ASPI-1306S-471M	470	1.08	0.90	0.73	3.0	1.1
ASPI-1306S-681M	680	1.40	0.96	0.64	2.5	0.96
ASPI-1306S-102M	1000	2.01	0.80	0.53	2.0	0.80

Test Conditions

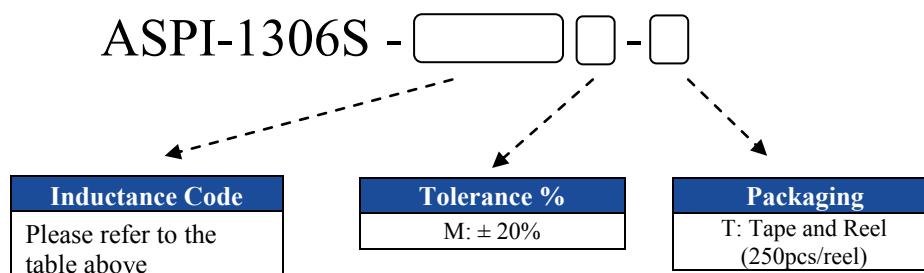
Inductance: 200kHz, 0.1V (10 μ H – 15 μ H)

Inductance: 100kHz, 0.1V (22 μ H – 1000 μ H)

Isat: $\Delta L/L$ (initial) $\geq -10\%$

Irms: $\Delta T \leq 40^\circ\text{C}$

OPTIONS AND PART IDENTIFICATION



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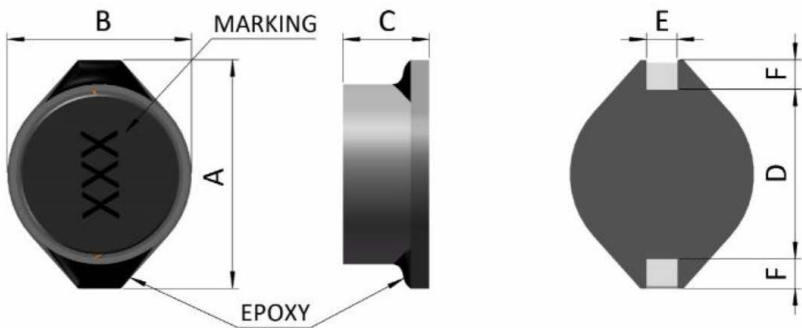
18.5 x 15.2 x 7.6 mm

ASPI-1306S

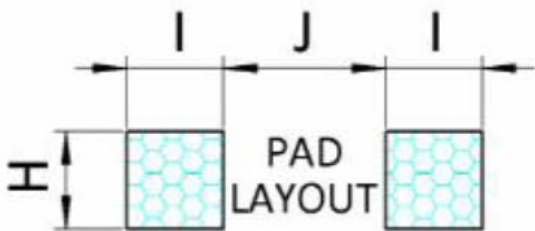


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MECHANICAL DIMENSIONS

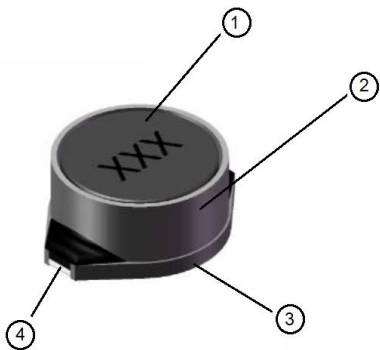


Part	A (max)	B (max)	C (max)	D	E	F
ASPI-1306S	18.54 ±0.15	15.24 ±0.15	7.62 ±0.15	12.7 ±0.15	2.54 ±0.15	2.54 ±0.15



Part	H	I	J
ASPI-1306S	2.79 ±0.15	2.92 ±0.15	12.45 ±0.15

Materials



No	Part Name	Material
1	Core	Fe ₂ O ₃
		Mn ₃ O ₄
		ZnO
		TMH 219 expoy insulating powder (Black)
2	Wire	Copper
		Polyurethane Resin
3	Base	Aromatic polyester resin
		Class fiber
4	SN	CU
		Sn
		Ni

Dimension: mm

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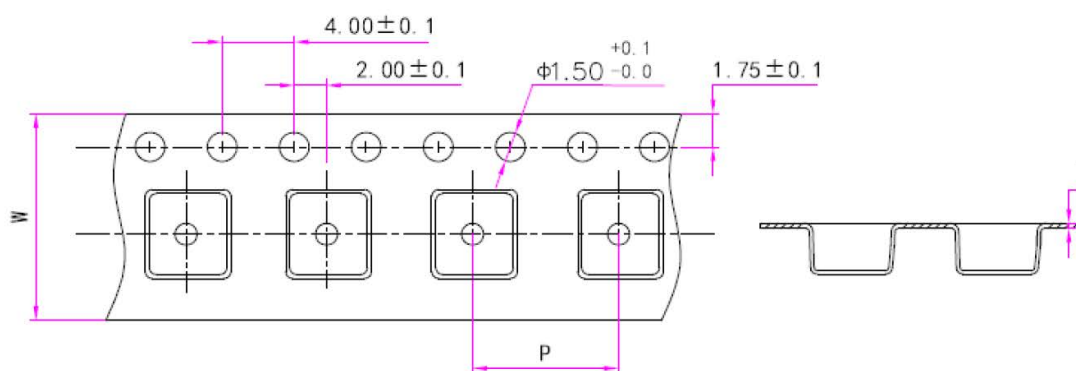
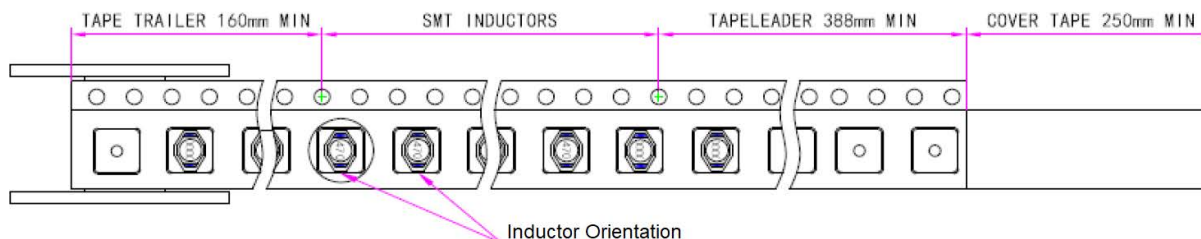


18.5 x 15.2 x 7.6 mm

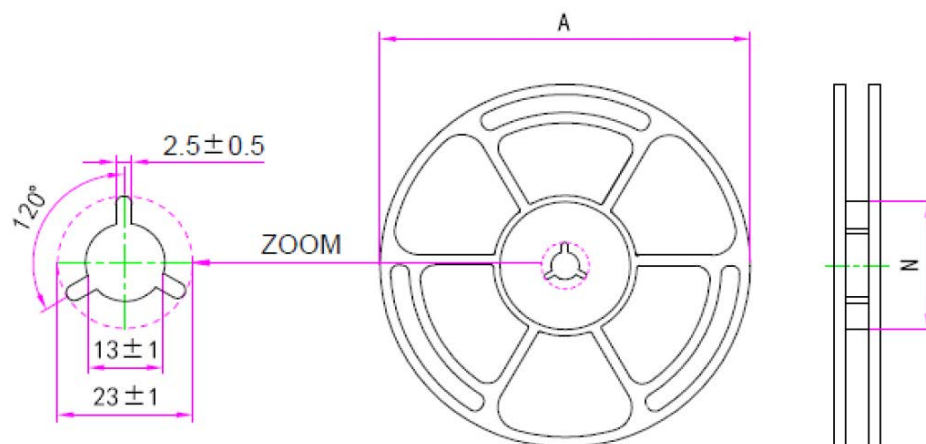
ELECTRICAL SPECIFICATION CHART

Packing

T: 250pcs / reel



W	P	T
32 ± 0.3	20 ± 0.1	0.35 ± 0.05



A	N
330	100

Dimension: mm

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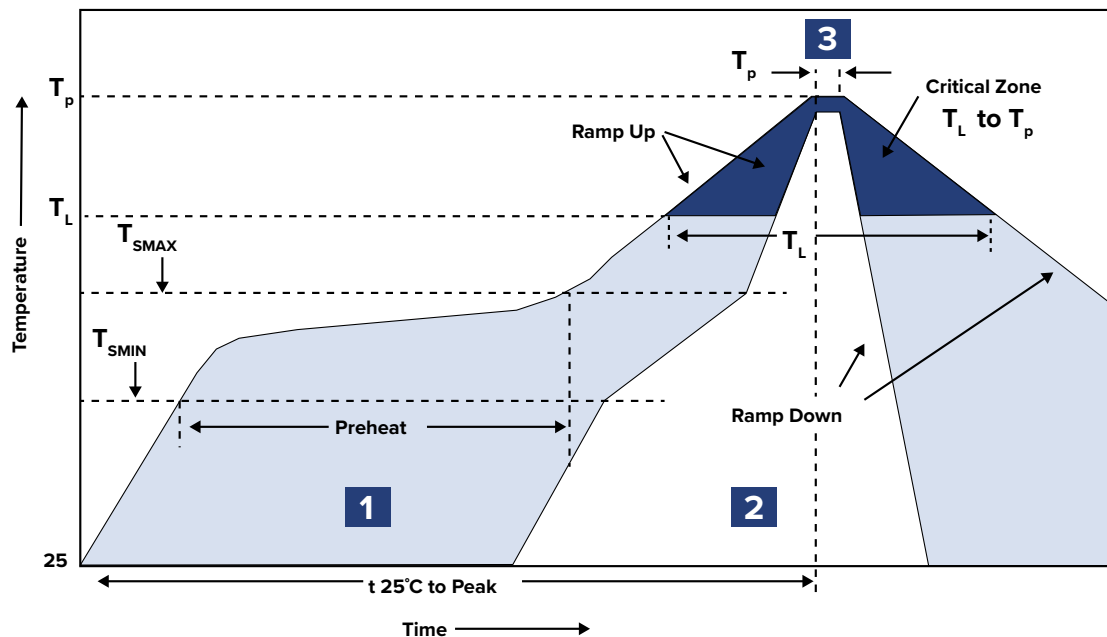


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REFLOW PROFILE:



Zone	Description	Temperature	Time
1	Preheat / Soak	$T_{S\text{MAX}}$ 150°C ~ 180°C	60 ~ 120 sec.
2	Reflow	T_L 230°C	40 sec.
3	Peak heat	T_p 250°C ± 5°C	10 sec. MAX

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