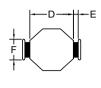
# P/N: FASPI-1608HC-101K

## Outline Dimensions(Unit:mm)









Top view

Side view

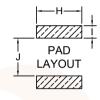
Bottom view

Α	В	С	D	Е	F
Max	Max	Max	REF	REF	REF
22.2	15.24	8.00	15.0	3.45	7.70

### **Electronical Schematic**

# Suggested Pad layout





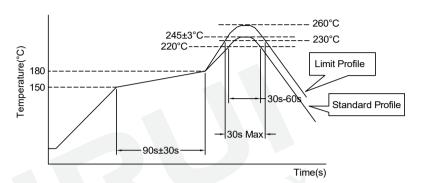
Н	7.50 REF
1	3.50 REF
J	14.5 REF

# Electrical Characteristics(@25°C)

Inductance 100KHz,0.1V	DC Resistor	Isat (A Max)	Irms (A)△T≤40°C
100.0uH±10%	170.0mΩ Max	L(2.00A)≥90%*L0A	3.60A

<sup>\*\*\*</sup>Operating Temperature: -40°C~+125°C (Temperature rise included)

## Recommended Soldering Temperature Graph.



	Standard Profile	Standard Profile	
Pre-heating	150~180°C,90s±30s		
Heating	above 220°C,30s-60s	above 240°C,30s Max	
Peak temperature	245°C±3°C	260°C,10s	
Cycle of reflow	2 times	2 times	

100.0uH±10%	170.0mΩ Max	L(2.00A)≥90°		

( i eiiihei	ature rise iricit	uueu)
***Storage	Temperature:	-40°C~+125°C

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				www.fuantronics.net
				TEL: +86-550-7814888
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<b>—</b>	
Tolerances unless (.X)±0.50	otherwise spec

Unit of measurement: mm

	Make: Qiumei.Liu
ed:	Checked: Beson. zhan
	Approved: Anson. zhan

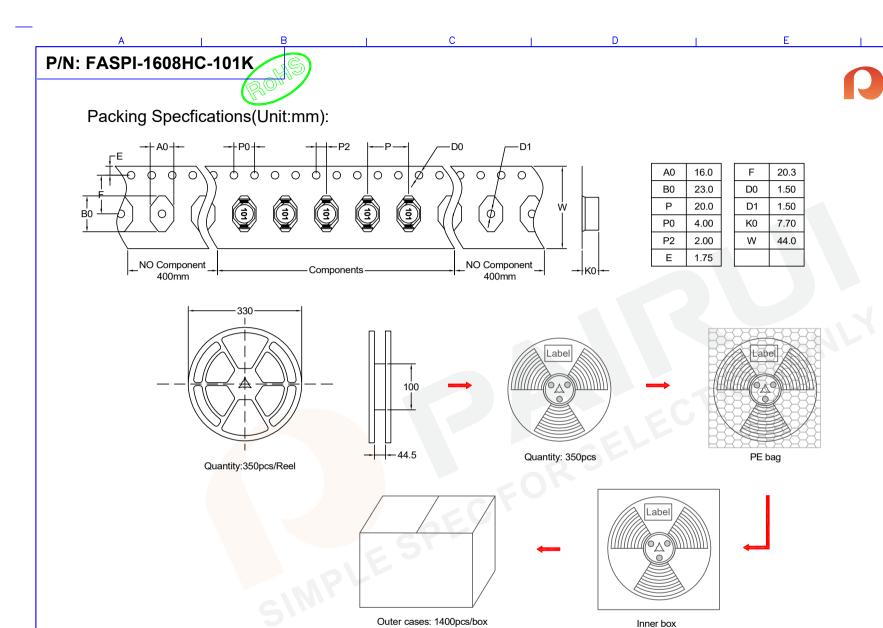
<b>DRAWING TITLE</b>	
SMD NO-SHIELDED POWER INDUCTORS	

Material Number: A341608XS140

Customer Name:
Document/Rev: 00
Specification Sheet: 1 of 4
Date of Recognition: July./20/2020

<sup>\*\*\*</sup>Storage Humidity:RH10%~70%

<sup>\*\*\*</sup>Weight:Approx 3.58g.



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Insufficient boxes filled with inner boxes or fillers



Tolerances unless otherwise specified: (.X)±0.50 (.XX)±0.25 Unit of measurement: mm

Make: Qiumei.Liu
Checked: Beson. zhan

Quantity: 700 pcs/box

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P/N: FASPI-1608HC-101K

# Reliability Testing:

Ltem Specified value Test m		Test methods
High temperature Storage test Reference documents: MIL-STD-202G Method 108A	1.No case deformation or change in appearance. 2.ΔL/L≤10%. 3.ΔQ/Q≤30%. 4.ΔDCR/DCR≤10%.	Temperature:85±2°C Time:96±2 hours.  Tested not less than 1 hour, not more than 2 hours at room temperature.  Temperature
Low temperature Storage test. Referencedocuments: IEC 68-2-1A 6.1 6.2	1.No case deformation or change in appearance. 2.ΔL/L≤10%. 3.ΔQ/Q≤30%. 4.ΔDCR/DCR≤10%.	Temperature:25±2°C Time:96±2 hours.  Tested not less than 1 hour, not more than 2 hours at room temperature.
Humidity test Reference Documents: MIL-STD-202G Method 103B	1.No case deformation or change in appearance. 2.ΔL/L≤10%. 3.ΔQ/Q≤30%. 4.ΔDCR/DCR≤10%.	1.Dry oven at a temperature of 40°±5°C for 24 hours. 2.Measurements At the end of this period 3.Exposure:Temperature:40±2°C,Humidity: 93±3%RH Time:96±2 hours. 4.Tested while the specimens are still in the chamber. 5.Tested not less than 1 hour, nor more than 2 hours at room temperature.  **Temps#-umidity**  **High humidity**  **High h
Heat endurance of Reflow soldering	1.No case deformation or change in appearance. 2.ΔL/L≤10%. 3.ΔQ/Q≤30%. 4.ΔDCR/DCR≤10%.	Preheat:150°C,60 second. Solder:Sn/Ag/Cu. Solder:Temperature:260±5°C. Flux:Rosin flux. Reflow peak time 10 second at 260°C



Ltem	Specified value	Test methods
Thermal shock test Reference documents: MIL-STD-202G Method 107G	1.No case deformation or change in appearance. 2.△L/L≤10%. 3.△Q/Q≤30%. 4.△DCR/DCR≤10%. For T:weighe≤28g:15 Min 28g≤weight≤136g:30 Min	First-40°C for T time,next+125°C Ttime as 1 cycle. Go through 20 cycles.
Solderability test Reference documents: MIL-STD-202G Method 208H IPC J-STD-002B	Terminals area must have 95% Min. Solder coverage.	Dip pads in flux then dip in solder pot at 245±5°C for 5 second. Soler:Sn(93.5)Ag(3.5). Flux:Rosin flux.
Vibration test Reference documents: MIL-STD-202G Method 201A	1.No case deformation or change in appearance. 2.ΔL/L≤10%. 3.ΔQ/Q≤30%. 4.ΔDCR/DCR≤10%.	Apply frequency 10~55Hz. 0.75mm amplitude in each of perpendicular direction for 2 hours. (total 6 hours).
Drop test Reference documents: MIL-STD-202G Method 203G	1.No case deformation or change in appearance. 2.∆L/L≤10%. 3.∆Q/Q≤30%. 4.∆DCR/DCR≤10%. For T:weighe≤28g:15 Min 28g≤weight≤136g:30 Min	Packaged & Drop down from 1m with 981m/s2(100G)attitude in 1 angle 1 ridges & 2 surfaces orientations.
Terminal strength push test Reference documents: JIS C 5321:1997	Pulling test: DEFINE:A:sectional area of terminal A≤8(Sq M) Force≥5N time:30sec 8(Sq M) <a≤20(sq 20(sq="" bending="" force≥10n="" force≥20n="" m)="" m)<a="" not="" off<="" on="" pcb,after="" products="" pull="" pulling="" should="" soldering="" td="" terminal="" test,="" test:="" testand="" the="" time:10sec=""><td>Bend the testing PCB at middle point, the deflection shall be 2mm  Pulling lest  X  R0.5  Bending test</td></a≤20(sq>	Bend the testing PCB at middle point, the deflection shall be 2mm  Pulling lest  X  R0.5  Bending test

REV	DESCRIPTION	APPD	DATE

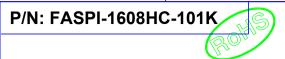
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Tolerances unless otherwise specified:
(.X)±0.50 (.XX)±0.25
Unit of measurement: mm

	Make: Qiumei.Liu	DRAWING
:	Checked: Beson. zhan	SMD NO-SH POWER IND
	Approved: Anson. zhan	Material Number: A34

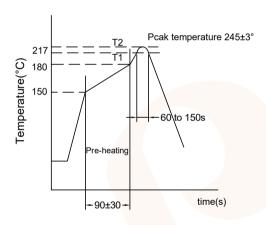
	DRAWING TITLE	Customer Name:
	SMD NO-SHIELDED	Document/Rev: 00
_	POWER INDUCTORS	Specification Sheet: 3 of 4
	Material Number: A341608XS140	Date of Recognition: July./20/2020





Ltem	Specified value	Test methods
Resistance to solvent test Reference documents: IEC 68-2-45:1993	No case deformation or change in appearance,or obliteration of marking	To dip parts into IPA solvent for 5±0.5Min, then drying them atroom temp for 5 Min,at last,to brushing making 10 times.
Electronic characteristic test of major products	Refer to catalogue of specific products	Refer to catalogue of specific products
Overload test Reference documents:	1.During the test no smoke,no peculiar,smell, no fire	Apply twice as rated current for 5 minutes.

## Recommended solderability temperature profile:



Use rosin-based flux
Don't use high acidic flux with halide content exceeding 0.2(wt)% (chlorine conversion value).
Use lead-free solder, use Sn-3.0Ag-0.5Cu solder
Standard thickness of solder paste:0.12-0.15mm

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<b>O</b>	

Tolerances unless otherwise specified: (.X)±0.50 (.XX)±0.25
Unit of measurement: mm

	Make: Qiumei.Liu
l:	Checked: Beson. zhan
	Approved: Anson, zhan

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Customer Name:

Document/Rev: 00

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