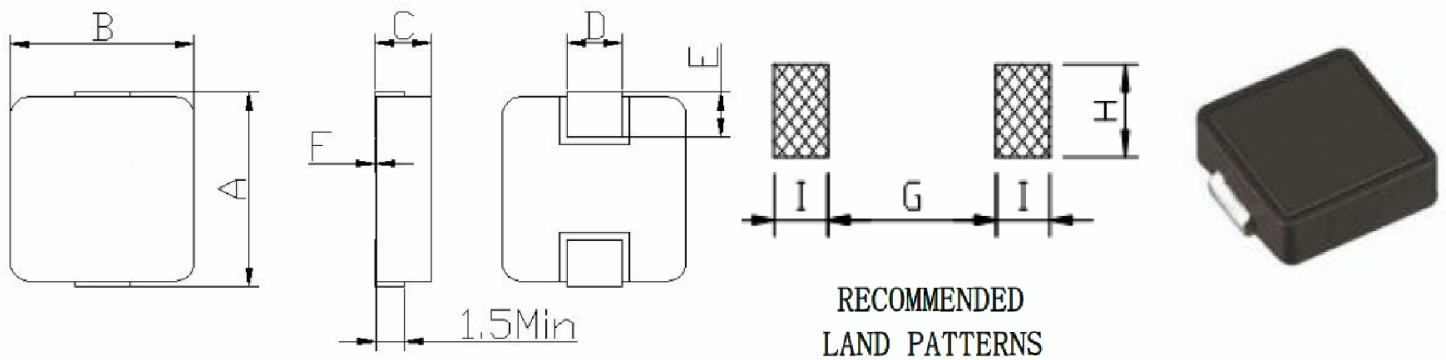


## Dimension and unit



Part No.	A MAX	B	C MAX	D	E	F TYP	G TYP	H TYP	I TYP
	13.2±1.0	12.8±0.5	6.0/6.5	3.8±0.2	2.5±0.5	0.15	8.0	4.5	3.25
Part Number	L0 Inductance ( $\mu\text{H}$ ) $\pm 20\%$		Heat Rating Current DC Amps.IDC(A)		Saturation Current Part Number DC Amps. Isat ( A )		DCR $\text{m}\Omega$ TYPICAL 25 ° C		DCR $\text{m}\Omega$ MAX
D HPI1260-004.7	4.7		13.0		22.5		8.5		13.0
D HPI1260-005.6	5.6		12.5		20.0		10.5		15.0
D HPI1260-006.8	6.8		11.5		18.5		11.0		14.0
D HPI1260-008.2	8.2		10		16.5		13.6		16.0
D HPI1260-010.0	10.0		9.0		16.0		18.0		22.0
D HPI1260-015.0	15.0		8.0		12.0		29.0		35.0
D HPI1260-022.0	22.0		6.0		10.0		34.0		40.0
D HPI1260-033.0	33.0		4.5		7.5		65.0		75.0
D HPI1260-047.0	47.0		4.0		6.0		80.0		90.0
D HPI1260-068.0	68.0		3.0		4.5		120.0		140.0
D HPI1260-100.0	100.0		2.0		3.0		260.0		300.0
D HPI1260-120.0	120.0		2.0		2.5		310.0		330.0
D HPI1260-150.0	150.0		1.5		2.0		330.0		350.0

\*: you require another part number please contact with us.

\*\*: Inductance Tolerance  $\pm 20\%$

Note 1: All test data is referenced to 25°C ambient.

Note 2: Isat : DC current (A) that will cause Lo to drop approximately 30%

Note 3: Idc : DC current (A) that will cause an approximate  $\Delta T$  of 40°C

## 1. Performance Specification

Test equipment: Inductance\RDC--- 6377/502BC or equivalent, Isat\Irms--- Microtest 6379 & 6220 or equivalent.


Is Test frequency/Voltage: 100kHz/0.25V;

Isat: The DC current is that which cause a 20% inductance reduction from the initial value.

IDC: The DC current is inductor surface temperature to rise by 40°C ( Reference ambient temperature 25°C).

## 2. Reliability Data

Items	Requirements	Test Methods and Remarks
Operating Temperature Range	-40°C ~ +125°C	Including self-heating temperature rise.
Solderability	90% or more of electrode area shall be coated by new solder.	Dip pads in flux and dip in solder pot (96.5Sn/3.0Ag/0.5Cu) at 245 °C ± 5 °C for (5 ± 1) seconds.
Resistance to Soldering Heat	No visible mechanical damage. Inductance change: Within ±10%	Dip pads in flux and dip in solder pot (96.5Sn/3.0Ag/0.5Cu) at 260°C ± 5 °C for (10 ± 1) seconds.
Low temperature stroe	No visible mechanical damage. Inductance change: Within ±10%	Stroe temperature -40 ± 2 °C for total 1000hr.

High temperature stroe	No visible mechanical damage. Inductance change: Within $\pm 10\%$	Stroe temperature $125 \pm 2^\circ\text{C}$ for total 1000hr.
Static Humidity	No visible mechanical damage. Inductance change: Within $\pm 10\%$	Inductors shall be subjected to $(93 \pm 3)\%RH$ . at $40^\circ\text{C} \pm 2^\circ\text{C}$ for $96 \text{ h} \pm 2 \text{ h}$ .Inductors are to be tested after having air dried for 2 hours.
Thermal shock	No visible mechanical damage. Inductance change: Within $\pm 10\%$	The test sample shall be placed at $(-40 \pm 3)^\circ\text{C}$ and $(85 \pm 2)^\circ\text{C}$ for $(30 \pm 3)$ min, different temperature conversion time is 2~3 minutes. The temperature cycle shall be repeated 5 cycles.
Mechanical Shock	 <p>No evidence of terminal peel off and wire broken.</p>	Inductors shall be Soldering on the PCB with 1.0mm thick and fixed them in a 15cm big.,1.4Kg weight cube with brass base, let it nature fallen form 0.5m height (X,Y,Z three axes)
Adhesion of terminal electrode	Strong bond between the pad and the core, without come off PC board.	10 N, $10 \text{ s} \pm 1 \text{ s}$ . Inductors shall be subjected to $260^\circ\text{C} \pm 5^\circ\text{C}$ for $20 \text{ s} \pm 5 \text{ s}$ Soldering in the base whit 0.3mm solder. And then aplomb electrode way plus tax 10 N for $10 \pm 1 \text{ s}$ seconds.

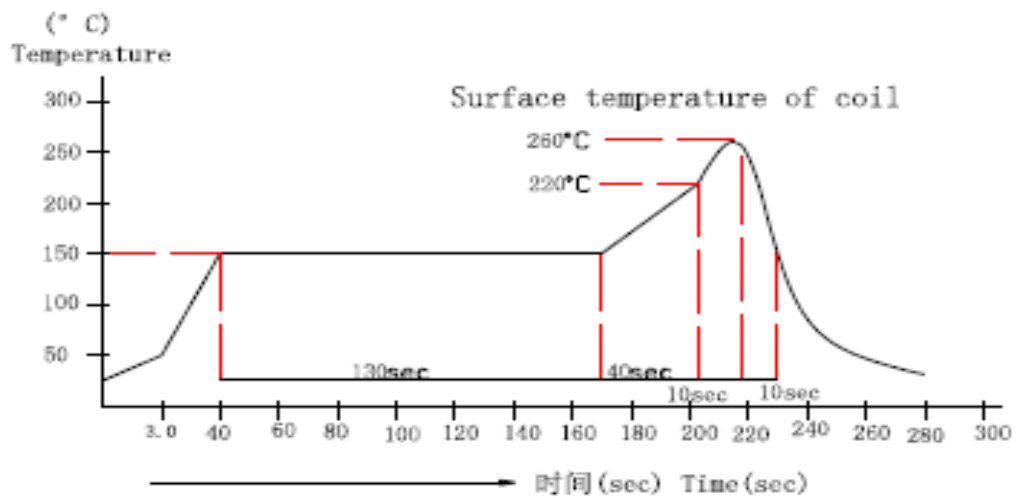
### 3. Recommended soldering profile

Applicable soldering process to the products is reflow soldering.

#### 3.1 Soldering Materials

- ① Solder: Sn-3.0Ag-0.5Cu
- ② Flux: Use rosin-based flux, but not strongly acidic flux (with chlorine exceeding 0.2 wt%). Do not use water-soluble flux.

#### 3.2 Soldering Profile



## 4. Inspection Rules

1 The inspection must be performed per GB/T2828.1-2003, with its examination level: Appearance and dimensions, II, AQL=0.4; LOA and L30DC, S-4, AQL: 0.15;

2 Inspection will be completed and inspection result will be feedback to WTRL in written within one month after cores are received from WTRL or it will be considered approved by customer.

## 5. Storage Methods

### 5.1 Storage Period

To maintain the solderability of terminal electrodes and to keep the packing material in good condition, product should be used within 6 months from the time of delivery. And the solderability of products electrodes may decrease as time passes, so in case of storage over 6 months, solderability shall be checked before actual usage.

### 5.2 Storage Conditions

① Store products in a warehouse in compliance with the following condition:

Temperature: -10 to +40°C

Humidity: 30~70%RH

② Do not subject products to rapid changes in temperature and humidity.

③ Do not store the products in chemical atmosphere such as one containing sulfurous acid gas or alkaline gas, that will causes poor solderability and corrosion of inductors.

④ Do not store products in bulk packaging to prevent collision among inductors which causes core chipping and wire breakage.

⑤ Store products on pallets to protect from humidity, dust, etc.

⑥ Avoid heat shock, vibration, direct sunlight, etc.

## **6. NOTE**

6.1 Any revision to the specification Approval must be confirmed by both the supplier and the customer, otherwise the revision is invalid.

6.2 In case of using the product for the purpose other than general electronics devices, we shall not be held liable for any dysfunctions in or damage to the equipment with which the product is used.

6.3 Our specification limits the quality of the component as a single unit. Please ensure the component is thoroughly evaluated in your application circuit.

6.4 The specification Approval should be sent back to the supplier with customer's chop on it within 7 days after receiving it, or we will take it as approved by customer.