



上海立凯电控科技有限公司

Shanghai LineKey Technology Co., Ltd.



Specification For Approval

规格书

客户名称:

部件名称:

客户料号:

立凯料号:

贴片磁珠

FBH1005A-121Y

供方确认			客户确认
制作	审核	核准	
吴子晗	薄双燕	陈余想	

Spec 变更记录:

版本	序号	更改描述	更改原因	备注
A0	01	Released		

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客户/CLIENT:

型号/MODEL:

FBH1005A-121Y

承制方/MANUFACTURER: 上海立凯电控科技有限公司

版本/REV.: A0

页数: 2/5

1. Scope

This specification applies to FBH1005A-121Y Multilayer Chip Bead Ferrite.

2. Product Description and Identification (Part Number)

FBH 1005A - 121 Y

① ② ③ ④

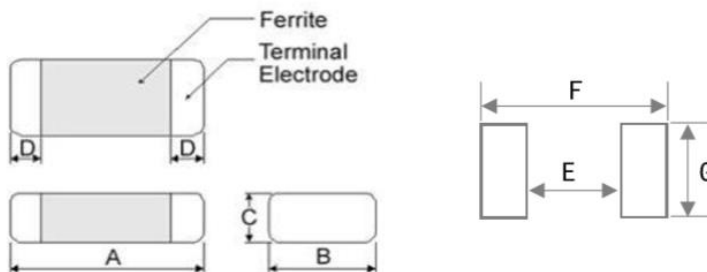
- ① Product Series: Multilayer Chip Bead Ferrite
- ② Size: 1.0mm x 0.5mm x 0.5mm
- ③ Impedance: 120Ω@100MHz
- ④ Tolerance: ±25%

3. Operating & Storage Temperature

- 1) Operating temperature range : -55℃ ~ +125℃ (Including Self-heating) .
- 2) Storage temperature range (packaging conditions): -40℃ ~ +125℃ and RH 70% (Max.)

4. Shape and Dimensions (Unit: mm)

Dimensions and recommended PCB pattern for reflow soldering



A(mm)	B(mm)	C(mm)	D(mm)	E _{Typ}	F _{Typ}	G _{Typ}
1.0±0.15	0.5±0.15	0.5±0.15	0.25±0.1	0.4	1.3	0.5

5. Electrical Characteristics

Part Number	Impedance (Ω)	Tolerance (±%)	Test Freq. (MHz)	DCR Max (Ω)	Rated Current Max(mA)
FBH1005A-121Y	120	25%	100	0.25	450

- 1) Rated Current: DC current that causes the temperature rise ($\Delta T = 40^\circ\text{C}$) from 25℃ ambient.

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型号/MODEL:

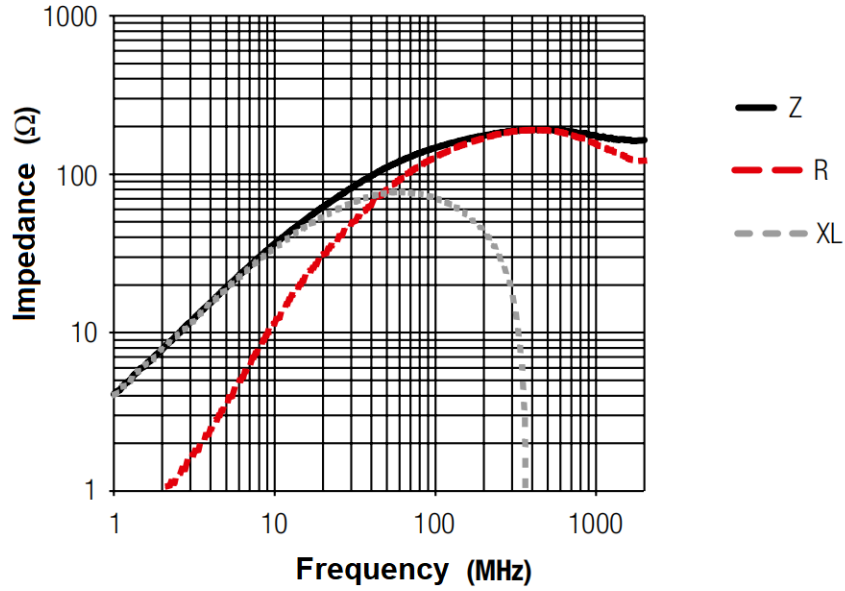
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6. Impedance Chart

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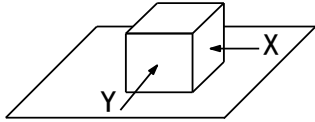
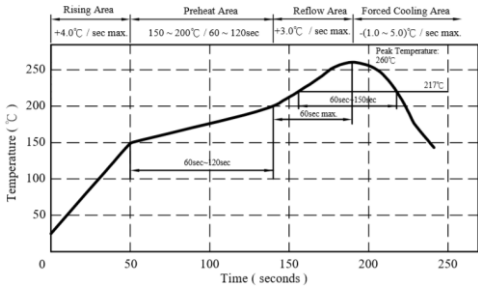
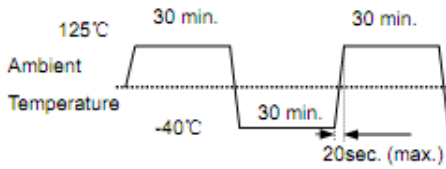
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7. Reliability Test

Items	Requirements	Test Methods and Remarks
7.1 Terminal Strength		<ol style="list-style-type: none"> 1) Solder the inductor to the testing jig using eutectic solder. Then apply a force in the direction of the arrow. 2) No removal or split of the termination or other defects shall occur. 3) 10N force. 4) Keep time: 5±2s.
7.2 High Temperature	<ol style="list-style-type: none"> 1) No visible mechanical damage. 2) Inductance change: Within ±10% 	<ol style="list-style-type: none"> 1) Storage Temperature :125+/-5°C. 2) Duration: 96 ±4 Hours. 3) Recovery: then measured at room ambient temperature after placing 24 hours.
7.3 Low Temperature	<ol style="list-style-type: none"> 1) No visible mechanical damage. 2) Inductance change: Within ±10% 	<ol style="list-style-type: none"> 1) Storage Temperature :125+/-5°C 2) Duration: 96 ±4 Hour. 3) Recovery: then measured at room ambient temperature after placing 24 hours.
7.4 Vibration test	<ol style="list-style-type: none"> 1) No visible mechanical damage. 2) Inductance change: Within ±10% 	<ol style="list-style-type: none"> 1) Frequency range:10HZ~55HZ~10HZ. 2) Amplitude:1.5mm p-p. 3) Direction: X, Y, Z. 4) Time:1 minute/cycle,2hours per axis
7.5 High Temperature Storage Tested	<ol style="list-style-type: none"> 1) No visible mechanical damage. 2) Inductance change: Within ±10% 	<ol style="list-style-type: none"> 1) Storage Temperature :60+/-2°C. 2) Relative Humidity:90-95% RH. 3) Duration: 96 ±4 Hours. 4) Recovery: then measured at room ambient temperature after placing 24 hours.
7.6 Resistance to Soldering Heat	<ol style="list-style-type: none"> 1) No visible mechanical damage. 2) Inductance change: Within ±10% 	<ol style="list-style-type: none"> 1) Re-flowing Profile: Please refer to the left graph. 2) Test board thickness: 1.0mm. 3) Test board material: glass epoxy resin. 4) The chip shall be stabilized at normal condition for 1~2 hours before measuring.
7.7 Thermal Shock	<ol style="list-style-type: none"> 1) No visible mechanical damage. 2) Inductance change: Within ±10% 	<ol style="list-style-type: none"> 1) Temperature and time: -40±3°C for 30±3 min→105°C for 30±3min, please refer to the left graph. 2) Transforming interval: Max, 3 minutes 3) Tested cycle: 100 cycles. 4) The chip shall be stabilized at normal condition for 1~2 hours before measuring.

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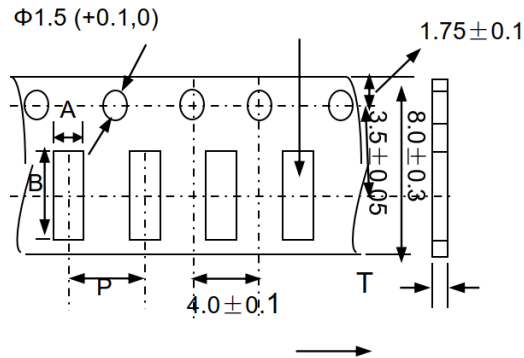
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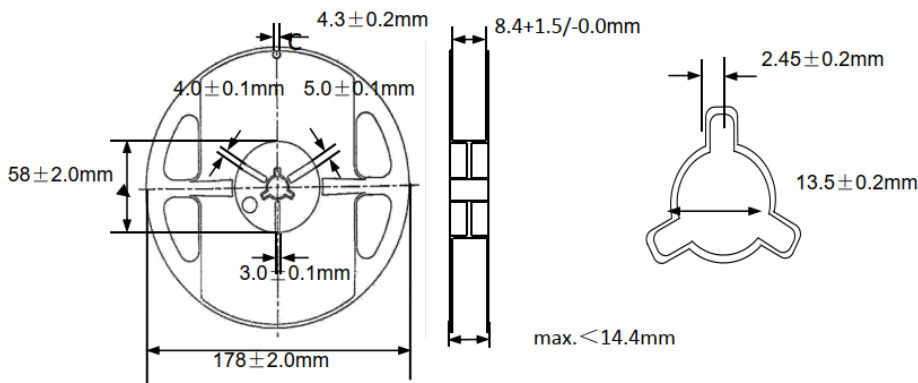
8. Packaging and Marking

8.1 Carrier Tape Dimensions



ITEM	A	B	P	T
DIM	0.65 ± 0.1	1.15 ± 0.1	2.0 ± 0.05	1.1 Max

8.2 Reel Dimensions



8.3 Packaging Specification

10,000PCS/ Reel

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