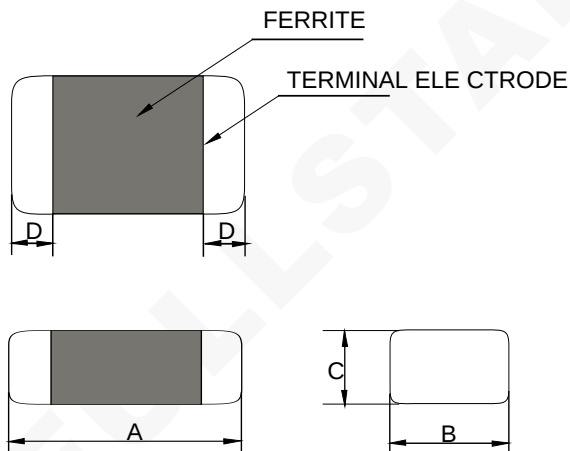
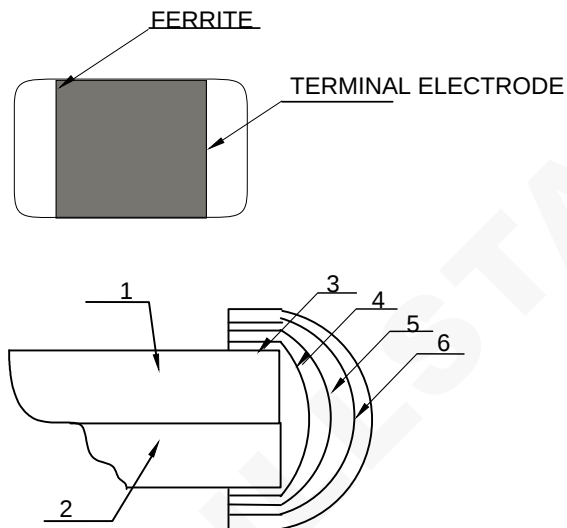


1. PHYSICAL CHARACTERISTICS(mm)



A=1.6±0.15 ; B=0.80±0.15 ; C=0.80±0.15 ; D=0.3±0.2

2. BILL OF MATERIALS



3. ELECTRONICAL SPECIFICATIONS

Part No	Impedance Ω	Test frequency (Hz)	SRF (MHZ)TYP	DC resistance (Ω) max	Rated current (IDC) (mA)MAX
SUPB160808T-221Y-2A5	220±25%	100M/0.2V	--	0.05	2500

Rated Current:Applied the current to coils,the temperature rise shall not be more than 40).

- Isat for inductance drop 30% from its value without current.
- Irms for a 40 rise above temperature 25 ambient.

Test equipment

Impedance: HP4287A

RDC:HP4338B / TH2512B

IDC : HP4291A+HP6632A

Test temperature range: +25°C typ.

Operating temperature range: -40°C ~+125°C

Storage temperature range: TMP0~25°C , RH75%

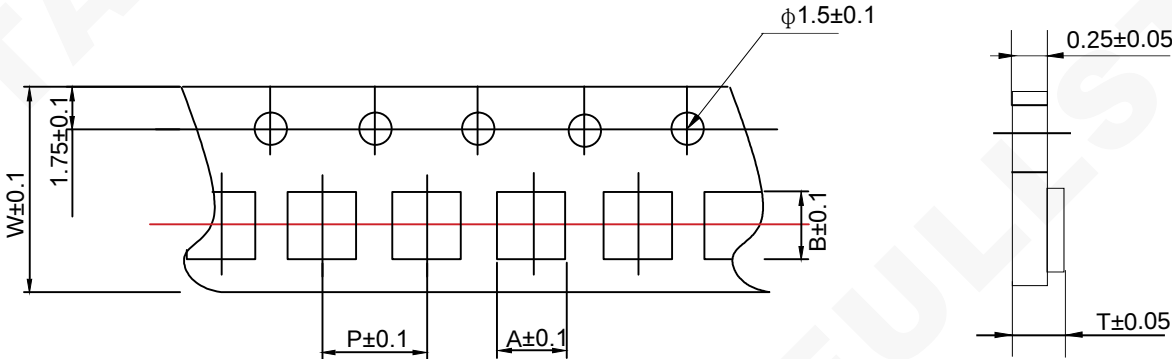
4. MATERIAL

NO.	PART	MATERIAL
1	Ferrite substance	Nio-Cuo-Zno-Ferrite
2	Silver electrode	Ag
3	Silver electrode	Ag
4	Cu plating	Cu
5	Ni plating	Ni
6	Sn plating	Sn

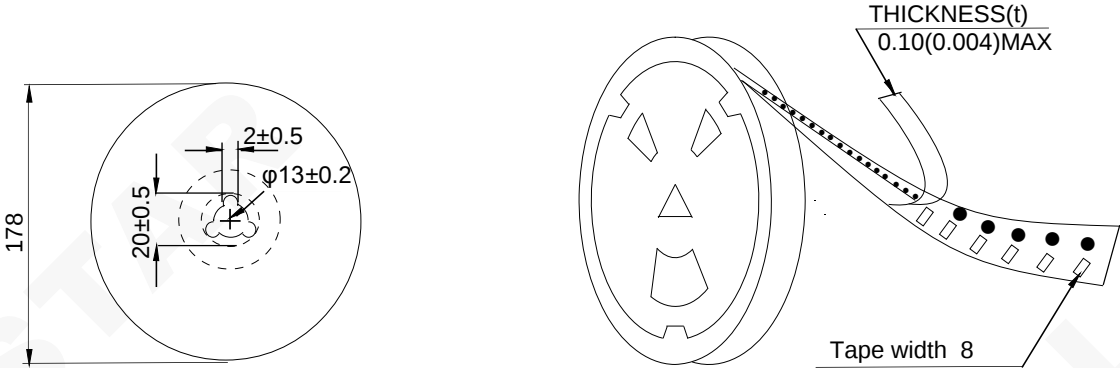
NAME	Power inductor			
CUSTOMER P/N	CIS10P221N		Date	2020-11-20
FULLSTAR P/N	SUPB160808T-221Y-2A5		Rev. A1	Page 1/4
Drawn. by :MingYue Ma		Checked. by :Zhi Xin Pu	Approve. by :Jie Sun	

Drawing changes	Rev.	
	Rev.	

1. TAPE SIZE(unit:mm)



Type	SIZE	A	B	W	P	T		CHIPS
ESBY	160808	1.1	1.9	8	4	1.1	0.95±0.05	4000



NOTES:
Temp 20℃ 48%RH
RoHS Compliant

NAME	Power inductor		
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Drawing changes	Rev.	
	Rev.	

RELIABILITY TEST

*Electrical performance test		
Item	Specification	Test method
Temperature Coefficient	$\Delta L/L \ 25^{\circ}\text{C} \leq \pm 10\%$	After the test should be completed, the sample has stabilized at an ambient temperature of -40 to $+125^{\circ}\text{C}$, at this time the ratio of the product's L (ΔL) value to the original L value, suitable for a normal temperature and humidity should be normal It is $\Delta L / L \ 25^{\circ}\text{C} \leq \pm 10\%$.
Overload test	During the test no smoke,no peculiar,smell, no fire.	Apply 1.2 times as rated current for 5 minutes.
*Environmental characteristics		
Reflow soldering	No damage or problem	Temperature distribution reflow Pre-heat: $150-180^{\circ}\text{C}$, 120 sec Peak temperature: $250 \pm 5^{\circ}\text{C}$, 5sec Maintain temperature: $230 \pm 5^{\circ}\text{C}$, 30 ± 5 sec

NOTES:
 Temp 20°C 48%RH
 RoHS Compliant

NAME	Power inductor		
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Drawing changes	Rev.	
	Rev.	

*Environmental characteristics		
Item	Specification	Test method
Solder ability	The electrodes shall be at least 90% covered with new solder coating	The soldering surface is immersed in the flux and then immersed in a 245±5°C tin furnace for 5 seconds.
Low Temperature Resistance	$\Delta L / L_0 \leq \pm 10\%$, there should be no mechanical damage	The sample should be left at 96 ± 4 hours at a temperature of -40± 3 ° C and returned to completion within 1 hour of the normal temperature range.
High temperature Resistance	$\Delta L / L_0 \leq \pm 10\%$, there should be no mechanical damage	The sample should be left for 96 ± 4 hours at a temperature of 125 ± 3 ° C. Tested after returning to the normal temperature range for 1 hour.
Humidity Resistance	$\Delta L / L_0 \leq \pm 10\%$, there should be no mechanical damage	The sample should be left at 96 ± 4 hours, at a temperature of 40 ± 2 ° C: and at a humidity (RH) of 90-95%. The test was resumed after 1 hour in the normal temperature range.
Temperature cycle	1. No visible mechanical damage. 2. The change in sense value is less than 10%. 3. The resistance value changes less than 5%	Maintain between -40°C and +125 °C for 15 min, transfer time ≤ 1 min, cycle times 5 times, recovery time: test within 24 h (recovery time at least 4 h)
Vibration	$\Delta L / L_0 \leq \pm 10\%$, there should be no mechanical damage	Samples should be soldered to printed circuit boards When the vibration has amplitude and 1.5 mm The frequency is from 10-55Hz / 1 minute, and the repetition should be applied to 3 directions (X, Y, Z) for 2 hours each for 6 hours.

NOTES:
Temp 20℃ 48%RH
RoHS Compliant

NAME	Power inductor		
CUSTOMER P/N	CIS10P221N	Date	2020-11-20
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Drawn. by :MingYue Ma	Checked. by :Zhi Xin Pu	Approve. by :Jie Sun	

Drawing changes	Rev.	
	Rev.	