DEVETECH ELECTRONICS SPECIFICATION FOR APPROVAL

Customer:

Product Name: Power Inductors

Parts No: ZW1307-821KT

Customer Parts No:

Quantity: 10PCS

Date: 2024-05-31

No: IND24053101

APPROVAL SIGNATURE				

APPROVED BY Q.C.DEPT.		CHECKED BY	DRAWN BY
王俊	陈远宏	成慧	余国霞

History of change

Rev.	Effective Date	Changed Contents	Changereasons	Approved By
1.0	2024-6-3	New release		

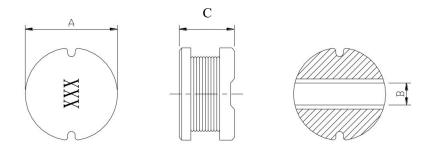
SPECIFICATIONS

1. Scop

This specification apply for CD1307 of power inductors

2. Appearance

2-1.Dimensions(mm)



2-2. Recommended Land

DIMENSIONS	Α	В	С
unit (mm)	13.3MAX	5.0 typ	7.3MAX

3. Coils Specification

3-1. Connection (Bottom View)



"S" is winding start

3-2. Electronical characteristics

Item	Item Specifications Measuring Conditions		Measuring Instrument
Inductance	820uH± 10%	100KHZ 0.25V	HP-4284A
D.C.R	D.C.R 1.30Ω MAX		HP34401A
IDC**	IDC** 1.1A MAX		HP4284A&HP42841A

Rev:1.0

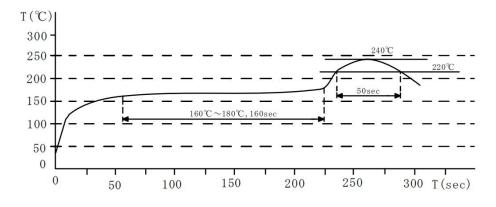
4. General Characteristics

- 4-1. Storage Temperature range : -40°C $\sim +100$ °C
- 4-2. Operating temperature range: $-40^{\circ}\text{C} \sim +100^{\circ}\text{C}$ (Including coil's self temperature rise)
- 4-3.External appearance: No external defects can be found in the visual inspection.
- 4-4.Electrode strength: No electrode detachment should be found when the device is pushed in two directions of X and Y with the force of 5.0N for 10±2 seconds after soldering between copper plate and the electrodes.

 (Refer to figure at right)
- 4-5. Temperature feature : Inductance coefficient is ($0\sim2000$)×10-6/°C (-25°C $\sim+80$ °C)
- 4-6. Vibration test: Inductance deviation is within ±3.0% after 1 hour sweeping vibration

in each three directions, namely, forward and backward, up and down, right and left. The frequency is $10\sim55\sim10$ Hz and the amplitude of 1 minute cycle is 1.5mm PP.

4-7. Recommended reflow condition:



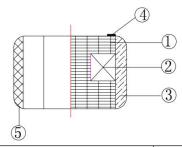
[%]This indicates the value of current when the inductance is 35% lower than its initial value at D.C superposition or D.C current when temperature rise ΔT=40°C whichever is lower .(Ta=20°C)

TYPE:ZW1307-821KT Rev:1.0

4-8. Shock test: Inductance deviation is within $\pm 3.0\%$ after the test with gum-block shock testing machine, once in each of the three perpendicular axis directions. The shock acceleration is 981m/s_2 .

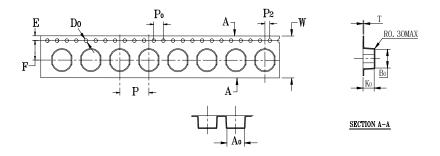
4-9.Humidity test: Inductance deviation is within $\pm 5.0\%$ after 96 ± 4 hours test under the condition of relative humidity of 90 \sim 95% and temperature of 40 $\pm 2^{\circ}$ C, and 1 hour storage under room ambient conditions after the device is wiped with dry cloth.

五、Construction and materials:



No:	Part name	Material	UL No:	
1.	Core	Ni-Zn Ferrite Core	1	
2.	WIRE	2UEW 180°C	E258243	
4.	Electrode	Sn99.3/Cu0.7	/	

六、Packing specification:



	DIMENSIONS (mm)				Q'TY(PCS)		
SERIES	W	Т	Р	A0	В0	K0	FOODOS
CD1307	24	0.4	14.0	13.45	13.35	7.4	500PCS