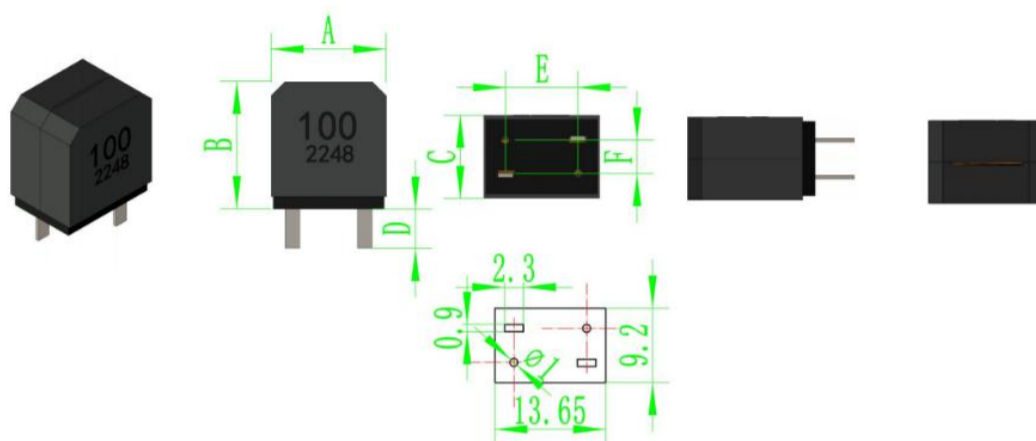


Power Inductors For Digital Amplifier

1、 DIMENSION:(UNIT:mm)

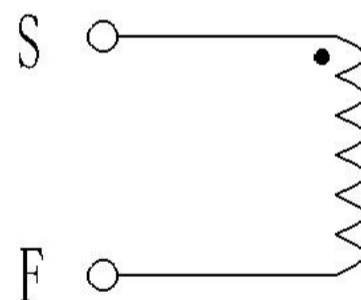


A	14.0±0.5
B	16.0MAX
C	10.0±0.5
D	5.0±0.5
E	9.8±0.5
F	4.3±0.5

2、 ELECTRICAL CHARACTER:

SCHEMATICS:

ITEM	Spec.		Test Frequency
L	10uH	±20%	100KHz/0.25V
IDC	12.5A	drop≤25%TYP	100KHz/0.25V
DCR	6.8mΩ	Max	25℃

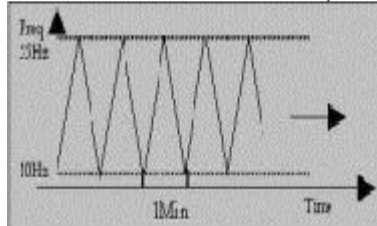
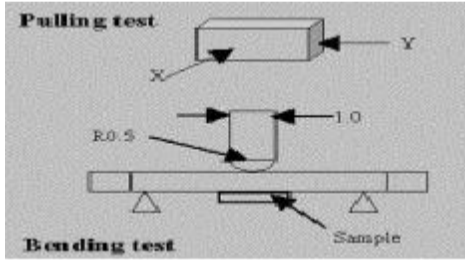


4、 ELECTRICAL CHARACTERISTIC:

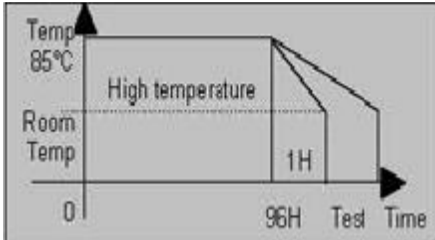
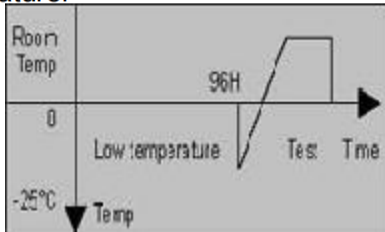
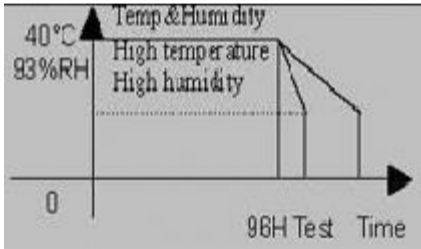
TEST EQUIPMENT: UC2910A/UC2517B/VR115+VR7225					QUANTITY: 5PCS		
TEST ITEM	L	DCR	IDC	Drop	A	B	C
TEST CONDITION	100KHz/ 0.25V	25℃	12.5A				
SPEC	10uH ±20%	6.8mΩ MAX	10uH ±20%	drop≤25%TYP	14.00 ±0.5	16.00 MAX	10.0 ±0.5
01	10.09	5.27	9.12	9.61%	14.25	15.71	10.15
02	10.04	5.23	9.22	8.17%	14.28	17.65	10.13
03	9.22	5.22	8.54	7.38%	14.22	15.77	10.17
04	9.61	5.19	8.71	9.37%	14.20	15.67	10.11
05	9.41	5.23	8.45	10.20%	14.23	15.70	10.15
X	9.67	5.22	8.80	8.94%	14.23	16.10	10.14
MAX	10.09	5.27	9.22	10.20%	14.28	17.65	10.17
MIN	9.22	5.19	8.45	7.38%	14.20	15.67	10.11

5、 Packing: 225pcs/Reel

6、Reliability Test:

Item	Required Characteristics	Test Method/Condition
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 $260\pm 5^{\circ}\text{C}$ for 5 second. Solder:Lead free
Heat endurance of Reflow soldering Reference documents: IPC J-STD-020B	1.No case deformation or change in appearance. 2. $\Delta L/L \leq 10\%$ 3. $\Delta Q/Q \leq 30\%$ 4. $\Delta \text{DCR}/\text{DCR} \leq 10\%$	Refer to the next page reflow curve Go through 3 times The peak temperature : $260\pm 5^{\circ}\text{C}$
Vibration test Reference documents: MIL-STD-202G Method 201A	1.No case deformation or change in appearance. 2. $\Delta L/L \leq 10\%$ 3. $\Delta Q/Q \leq 30\%$ 4. $\Delta \text{DCR}/\text{DCR} \leq 10\%$	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 203C	1.No case deformation or change in appearance. 2. $\Delta L/L \leq 10\%$ 3. $\Delta Q/Q \leq 30\%$ 4. $\Delta \text{DCR}/\text{DCR} \leq 10\%$	Packaged & Drop down from 1m with $981\text{m/s}^2(100\text{G})$ a tititude 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 $A \leq 8 (\text{Sq M})$ force $\geq 5\text{N}$ time:30sec $8(\text{Sq M}) < A \leq 20(\text{Sq M})$	Bend the testing PCB at middle point,the deflection shall be 2mm 
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 $5\pm 0.5\text{Min}$, then drying them at room temp for 5Min,at last ,to brushing making 10 times.

Reliability Test:

Item	Required Characteristics	Test Method/Condition
High temperature Storage test Reference documents: MIL-STD-202G Method 108A	1.No case deformation or change in appearance. 2. $\Delta L/L \leq 10\%$ 3. $\Delta Q/Q \leq 30\%$ 4. $\Delta DCR/DCR \leq 10\%$	Temperature: $85 \pm 2^\circ\text{C}$ Time : 96 ± 2 hours Tested not less than 1 hour, nor more than 2 hours at room temperature. 
Low temperature Storage test Referencedocuments: IEC 68-2-1A 6.1 6.2	1.No case deformation or change in appearance. 2. $\Delta L/L \leq 10\%$ 3. $\Delta Q/Q \leq 30\%$ 4. $\Delta DCR/DCR \leq 10\%$	Temperature: $-25 \pm 2^\circ\text{C}$ Time : 96 ± 2 hours Tested not less than 1 hour, nor 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. $\Delta L/L \leq 10\%$ 3. $\Delta Q/Q \leq 30\%$ 4. $\Delta DCR/DCR \leq 10\%$	1. Dry oven at a temperature of $40^\circ \pm 5^\circ\text{C}$ for 24 hours. 2. Measurements At the end of this period 3. Exposure:Temperature: $40 \pm 2^\circ\text{C}$, 
Thermal shock test Reference documents: MIL-STD-202G Method 107G	1.No case deformation or change in appearance. 2. $\Delta L/L \leq 10\%$ 3. $\Delta Q/Q \leq 30\%$ 4. $\Delta DCR/DCR \leq 1$	First -40°C for T time, last 125°C T time as 1 cycle. Go through 20 cycles. 