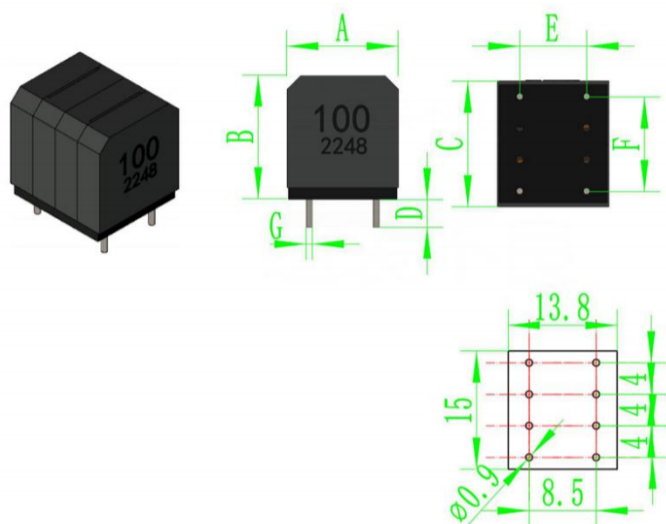


Power Inductors For Digital Amplifier

1、 DIMENSION:(UNIT:mm)

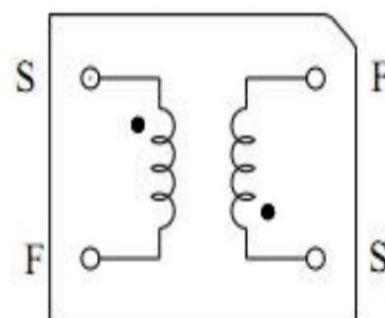


A	14.5 ± 0.5
B	16.0 ± 1.0
C	15.5 ± 0.5
D	3.5 ± 0.5
E	8.5 ± 0.3
F	12.0 ± 0.3

2、 ELECTRICAL CHARACTER:

SCHEMATICS:

ITEM	Spec.		Test Frequency
L1	10uH	$\pm 20\%$	100KHz/0.25V
L2	10uH	$\pm 20\%$	100KHz/0.25V
IDC1	9.5A	drop $\leq 25\%$ TYP	100KHz/0.25V
IDC2	9.5A	drop $\leq 25\%$ TYP	100KHz/0.25V
DCR1	14.5mΩ	Max	25°C
DCR1	14.5mΩ	Max	25°C

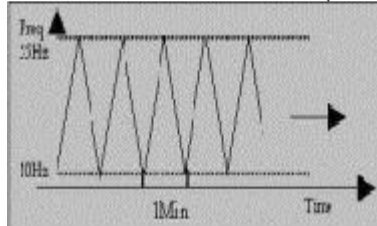
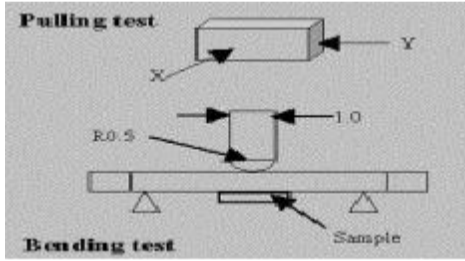


4、 ELECTRICAL CHARACTERISTIC:

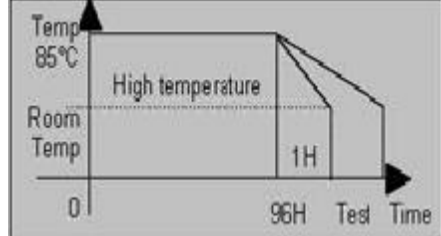
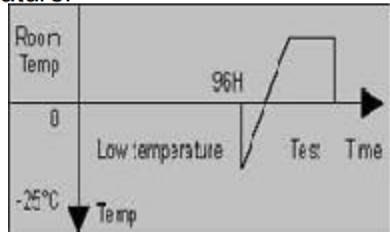
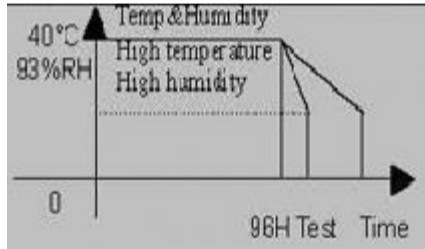
TEST EQUIPMENT: UC2910A/UC2517B/VR115+VR7225									QUANTITY: 5PCS		
TEST ITEM	L1	L2	DCR 1	DCR 2	IDC 1	IDC 2	Drop 1	Drop 2	A	B	C
TEST CONDITION	100KHz/ 0.25V		25℃		9.5A						
SPEC	10uH ±20%		14.5mΩ MAX		10uH 100KHz/ 0.25V		drop≤25%TYP		14.50 ±0.5	16.00 ±1.0	15.50 ±0.5
01	10.17	10.1	8.67	8.73	9.58	9.45	5.80%	6.44%	14.06	15.58	15.5
02	10.1	9.6	8.69	8.63	9.38	9.14	7.13%	4.99%	14.10	15.52	15.54
03	9.82	10.0	8.71	8.59	9.27	9.38	5.60%	6.20%	14.12	15.56	15.52
04	10.12	10.1	8.62	8.6	9.61	9.55	5.04%	5.26%	14.08	15.5	15.48
05	10.1	9.7	8.59	8.55	9.59	9.20	5.05%	5.35%	14.05	15.6	15.55
X	10.06	9.90	8.65	8.62	9.48	9.34	5.72%	5.65%	14.08	15.55	15.51
MAX	10.17	10.10	8.71	8.73	9.61	9.55	7.13%	6.44%	14.12	15.60	15.55
MIN	9.82	9.62	8.59	8.55	9.27	9.14	5.04%	4.99%	14.05	15.50	15.48

5、 Packing: 195pcs/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 ttitude 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 Referenced documents: 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. 