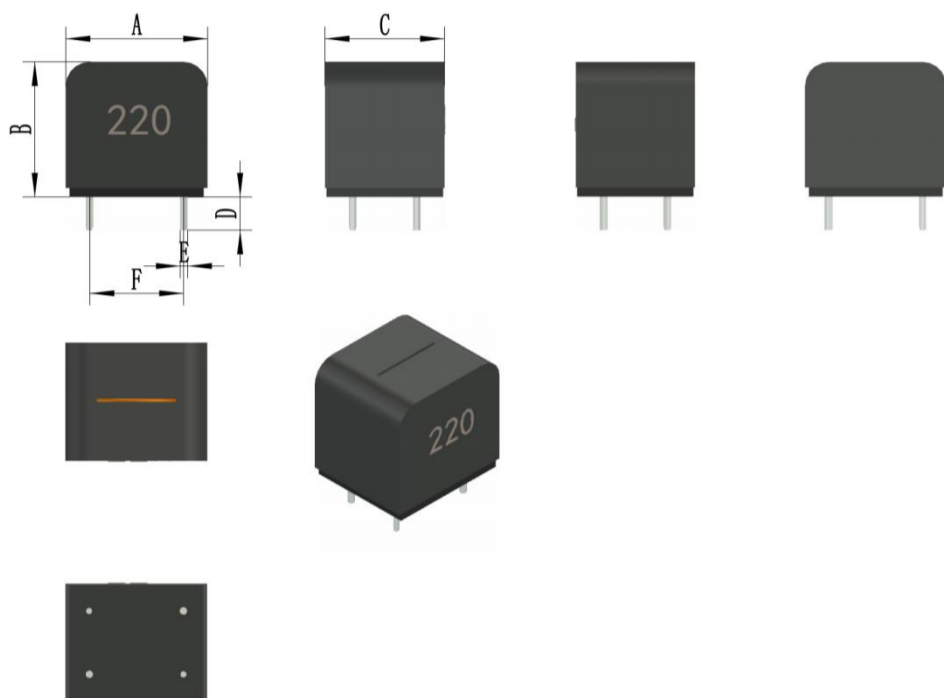


Power Inductors For Digital Amplifier

1、 DIMENSION:(UNIT:mm)

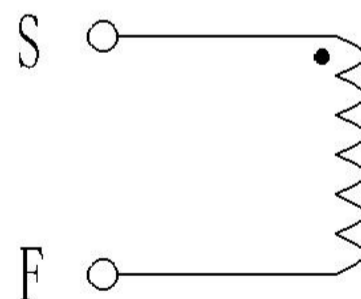


A	23.8MAX
B	23.0MAX
C	20.0±0.5
D	5.0±0.5
E	1.2±0.3
F	15.4±0.5

2、 ELECTRICAL CHARACTER:

SCHEMATICS:

ITEM	Spec.		Test Frequency
L	22uH	±20%	100KHz/0.25V
IDC	21A	drop≤25%TYP	100KHz/0.25V
DCR	9.3mΩ	Max	25℃

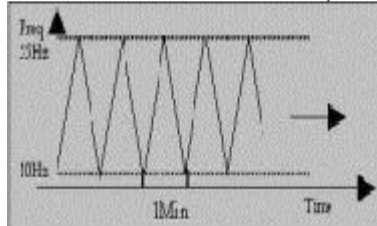
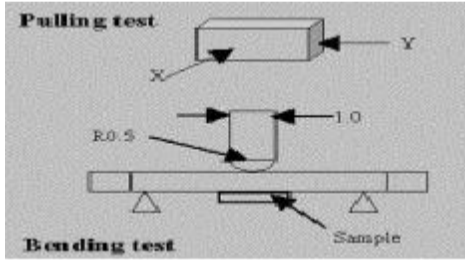


4、ELECTRICAL CHARACTERISTIC:

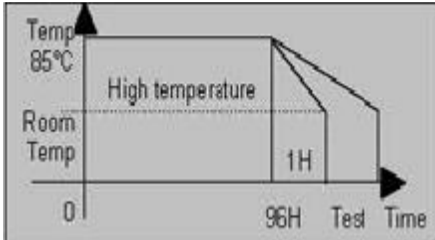
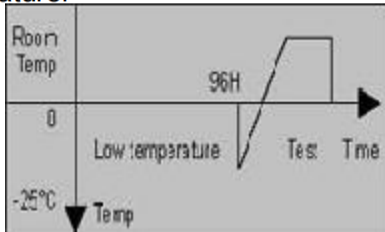
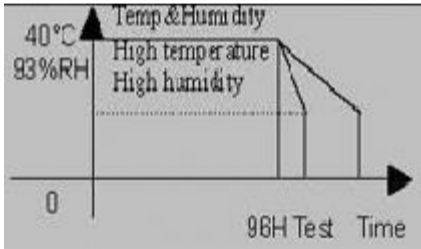
TEST EQUIPMENT: UC2910A/UC2517B/VR115+VR7225					QUANTITY: 4PCS		
TEST ITEM	L	DCR	IDC	Drop	A	B	C
TEST CONDITION	100KHz/ 0.25V	25℃	21A				
SPEC	22uH ±20%	9.3mΩ MAX	22uH ±20%	drop≤25%TYP	23.80 MAX	23.00 MAX	20.0 ±0.5
01	19.62	7.52	18.18	7.34%	23.26	22.15	19.96
02	19.65	7.50	18.16	7.58%	23.30	22.17	19.95
03	19.29	7.60	18.07	6.32%	23.28	22.15	19.96
04	19.54	7.47	18.09	7.42%	23.31	22.20	19.98
X	19.52	7.52	18.12	7.17%	23.28	22.16	19.96
MAX	19.65	7.60	18.18	7.58%	23.31	22.20	19.98
MIN	19.29	7.47	18.07	6.32%	23.26	22.15	19.95

5、Packing: 100pcs/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. 