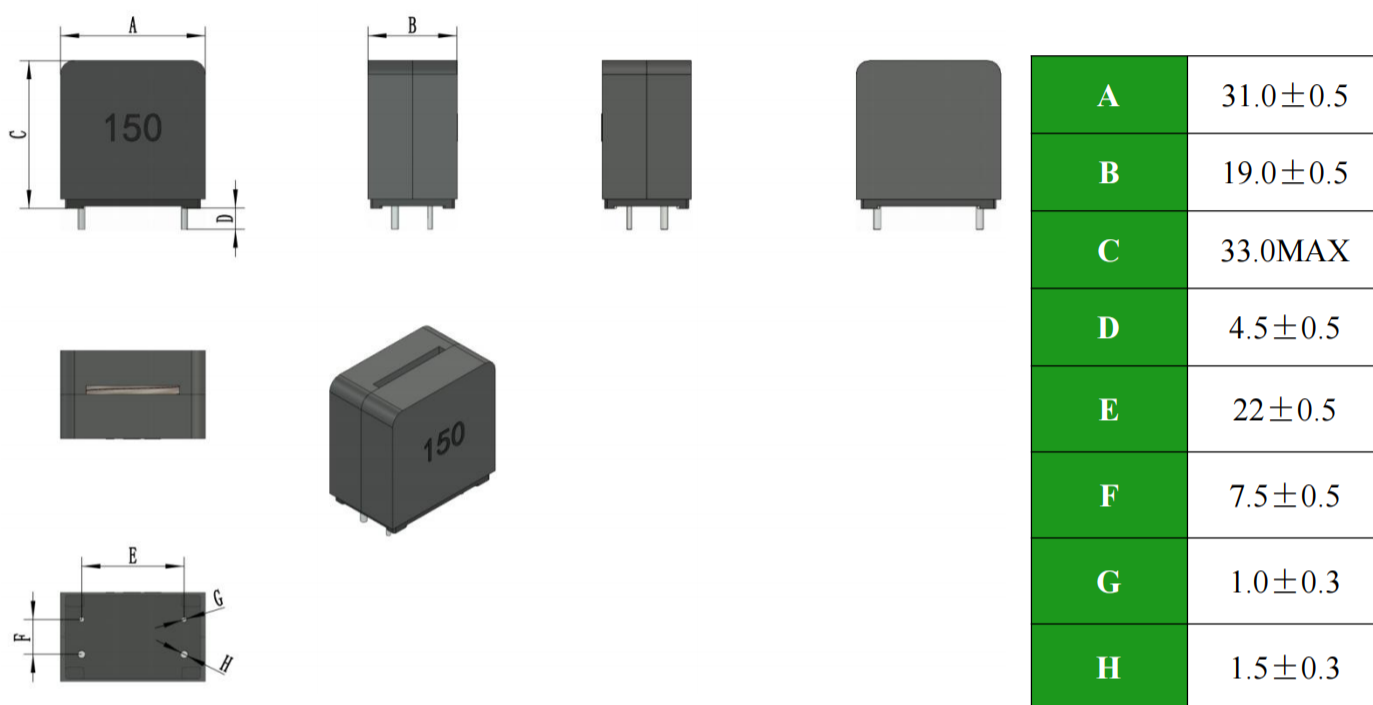


Power Inductors For Digital Amplifier

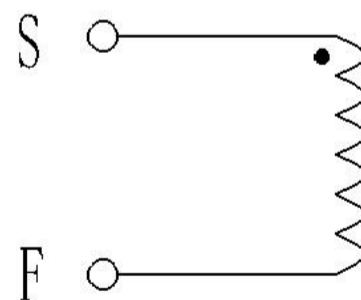
1、 DIMENSION:(UNIT:mm)



2、 ELECTRICAL CHARACTER:

SCHEMATICS:

ITEM	Spec.		Test Frequency
L	15uH	$\pm 20\%$	100KHz/0.25V
IDC	47A	drop $\leq 25\%$ TYP	100KHz/0.25V
DCR	6.4mΩ	Max	25℃

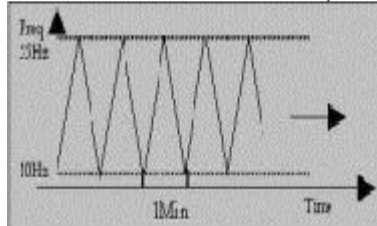
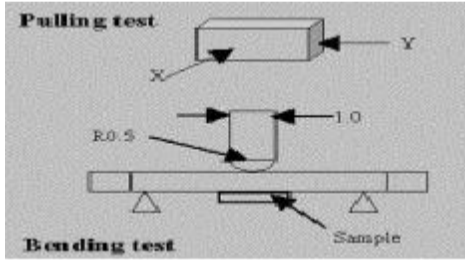


4、 ELECTRICAL CHARACTERISTIC:

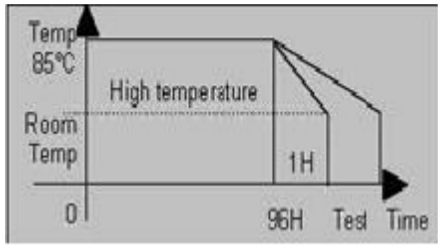
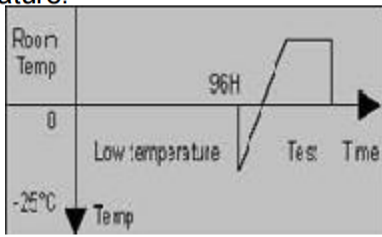
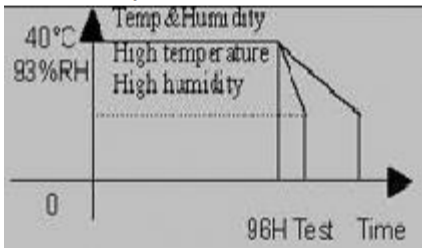
TEST EQUIPMENT: UC2910A/UC2517B/VR115+VR7225					QUANTITY: 4PCS		
TEST ITEM	L	DCR	IDC	Drop	A	B	C
TEST CONDITION	100KHz/ 0.25V	25℃	47A				
SPEC	15uH ±20%	6.4mΩ MAX	15uH ±20%	drop≤25%TYP	31.0 ±0.5	19.0 ±0.5	33.0 MAX
01	14. 62	5. 92	13. 58	7. 11%	31. 15	19. 12	31. 96
02	14. 65	5. 90	13. 56	7. 44%	31. 12	19. 17	31. 95
03	14. 29	5. 90	13. 57	5. 04%	31. 18	19. 15	31. 96
04	14. 54	5. 97	13. 49	7. 22%	31. 24	19. 15	31. 98
X	14. 52	5. 92	13. 55	6. 70%	31. 17	19. 14	31. 96
MAX	14. 65	5. 97	13. 58	7. 44%	31. 24	19. 17	31. 98
MIN	14. 29	5. 90	13. 49	5. 04%	31. 12	19. 12	31. 95

5、 Packing: 80pcs/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 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. 