

Zachry Car Audio Amplifier Specification

1 Model number: K1200D

2 Features:

- 1200W RMS Class-D amplifier.
- 1 ohm load stable.
- Double Side PCB and SMD components.
- Adjustable Input level, LPF, Subsonic function.
- Advanced short circuit, overload, over heat and over/low voltage protection.
- Heavy duty terminals.
- Optional remote controller.

3 Detailed specs:

3.1 Test Condition.

All the specs were tested with following condition unless noted.

1. Power supply: 14.4V DC power supply
2. Test signal: 80Hz sine wave.
3. Loads: Resistor dummy load.
4. Environment: 25 degree C, open air.
5. Relative humidity: 70%.
6. Instrument: Audio Precision SYS-2322A.

3.2 Output power performance

Following table is the RMS output power with THD+N(<22KHz) value at 5%, 3%, 2% and 1%.

Power THD+N	RMS power (1ohm)	RMS power (2ohm)	RMS power(4ohm)
5%	1150W	760W	450W
3%	1080W	740W	435W
2%	1060W	730W	425W
1%	1040W	700W	405W

Table 1 Output Power with THD+N

Following chart shows the output power with THD+N curve at 4ohm loads, 2ohm and 1ohm loads.

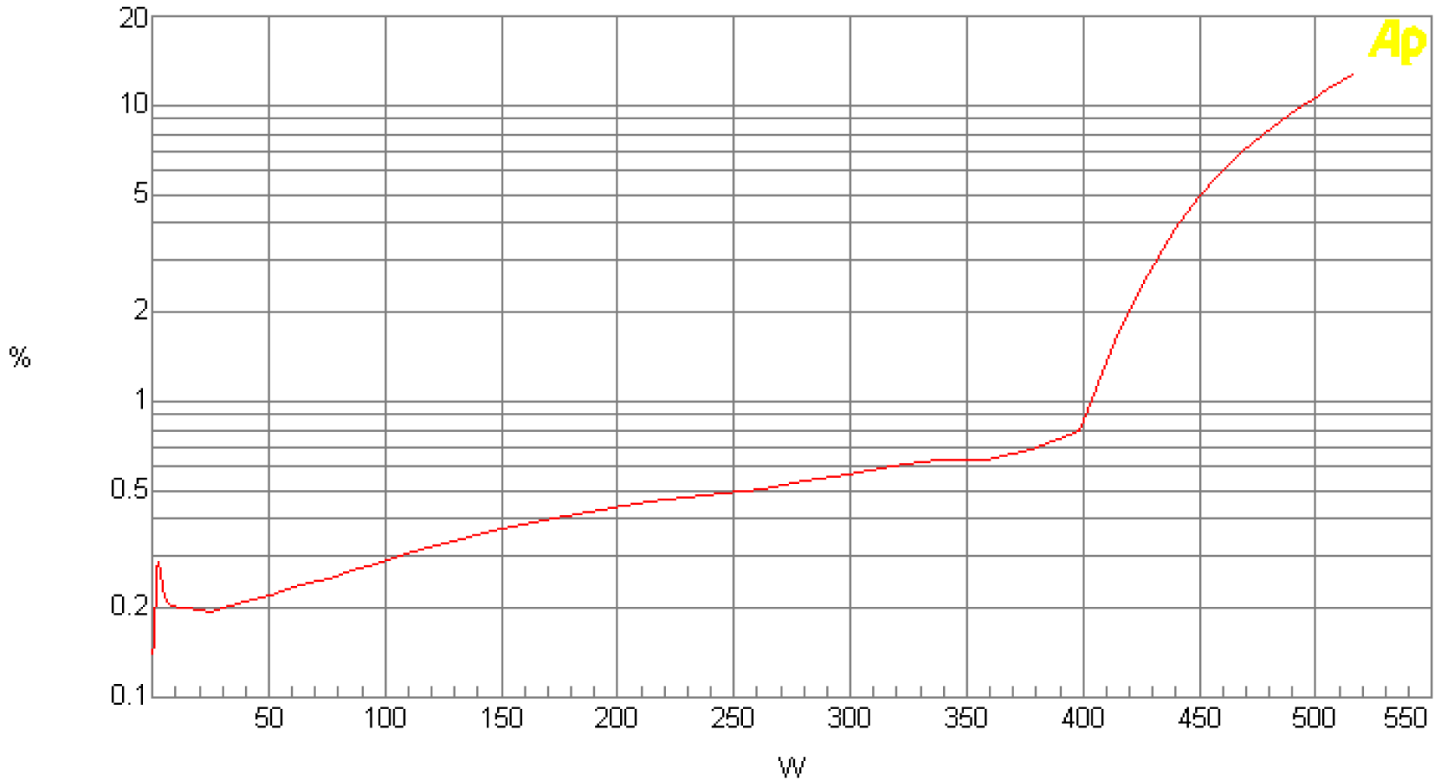


Chart 1. RMS output power @4ohm with THD+N.

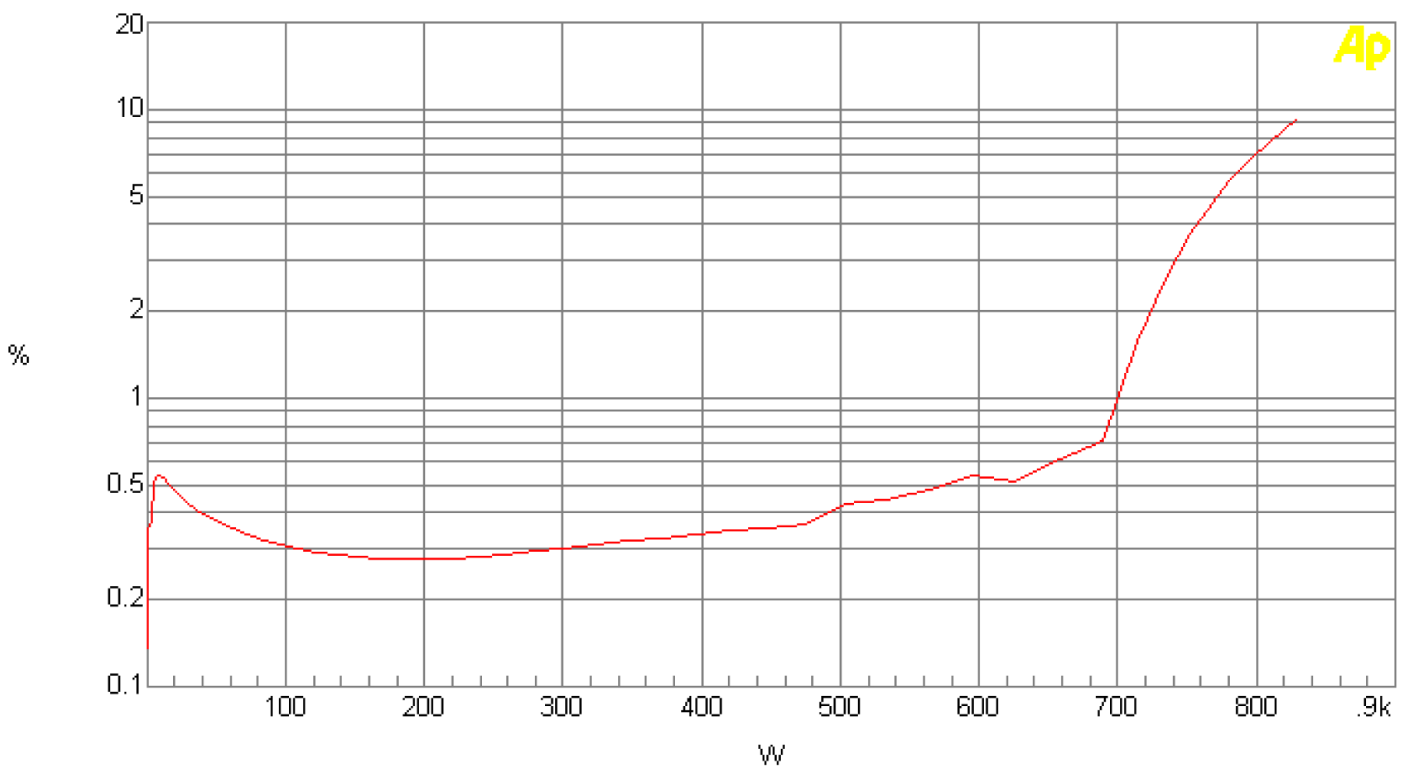


Chart 2. RMS output power @2ohm with THD+N.

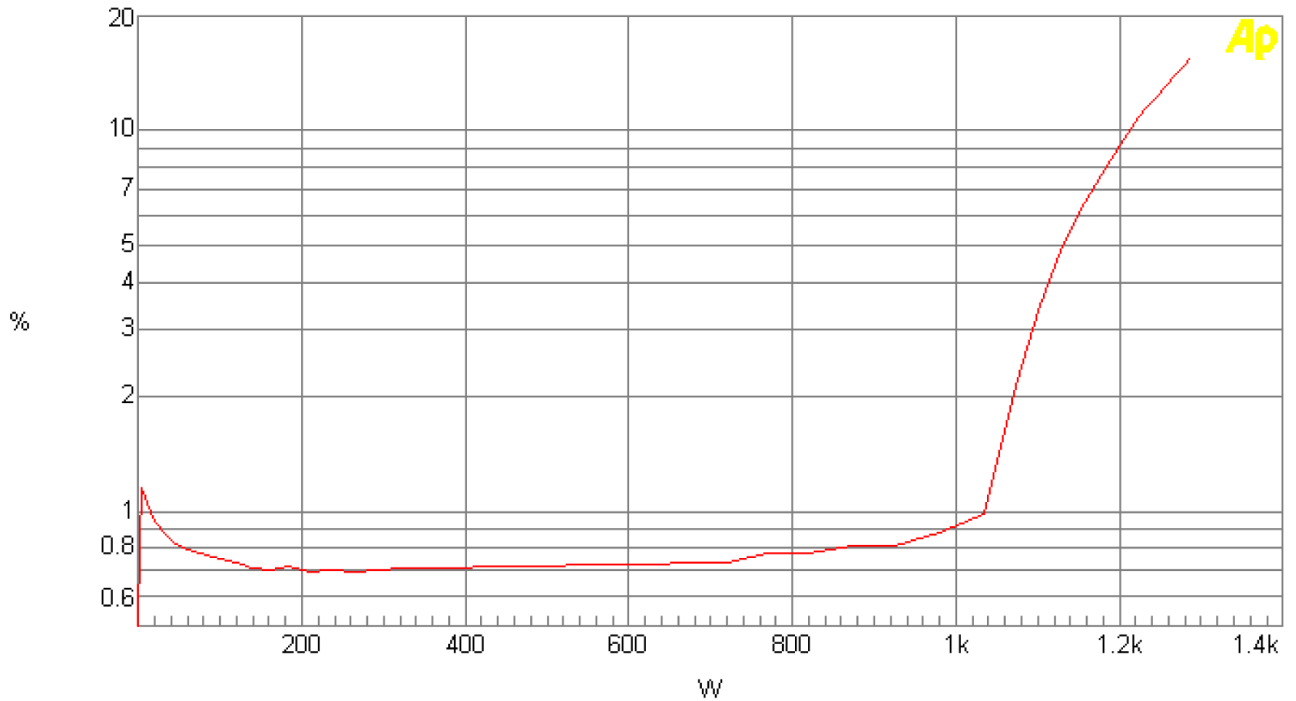


Chart 3. RMS output power @1ohm with THD+N.

3.3 Frequency Response

1. -3dB frequency response: 14Hz~228Hz.
2. -1dB frequency response: 25Hz~170Hz.

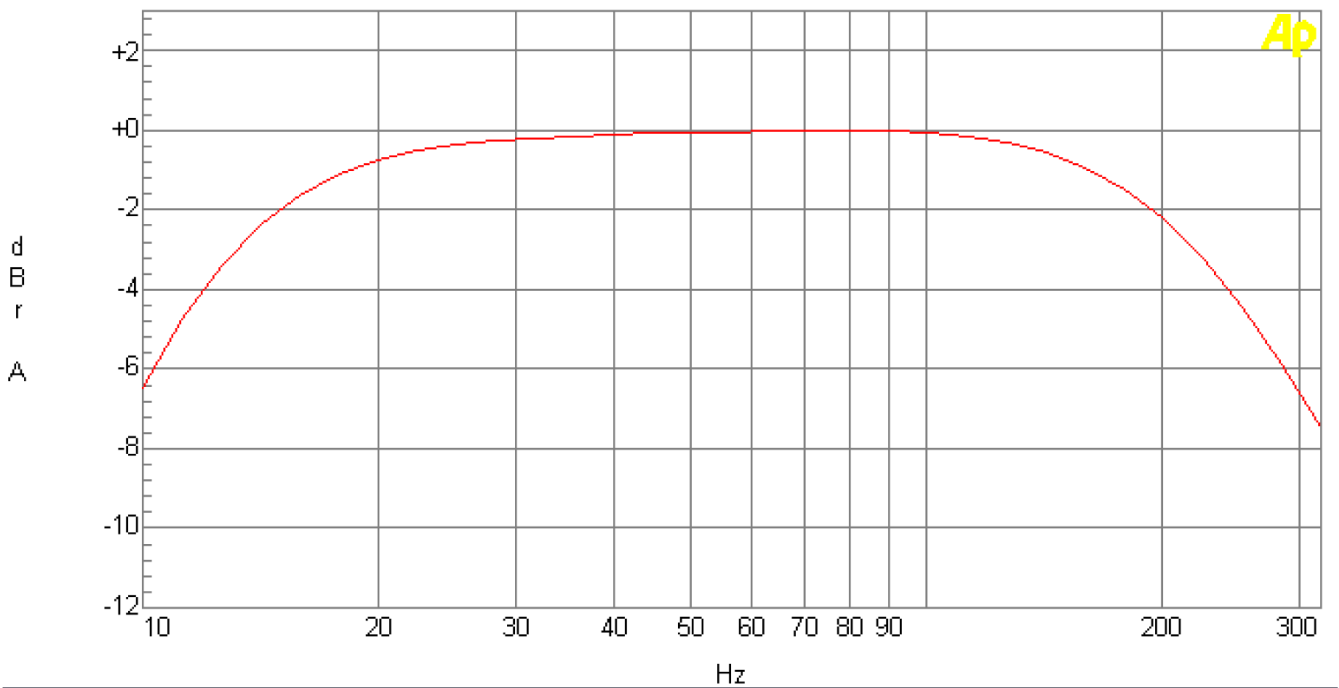


Chart 3. Frequency Response

3.4 LPF & Subsonic Filter features

1. LPF adjustable from 45Hz~228Hz.
2. Subsonic Filter adjustable from 14Hz~55Hz.

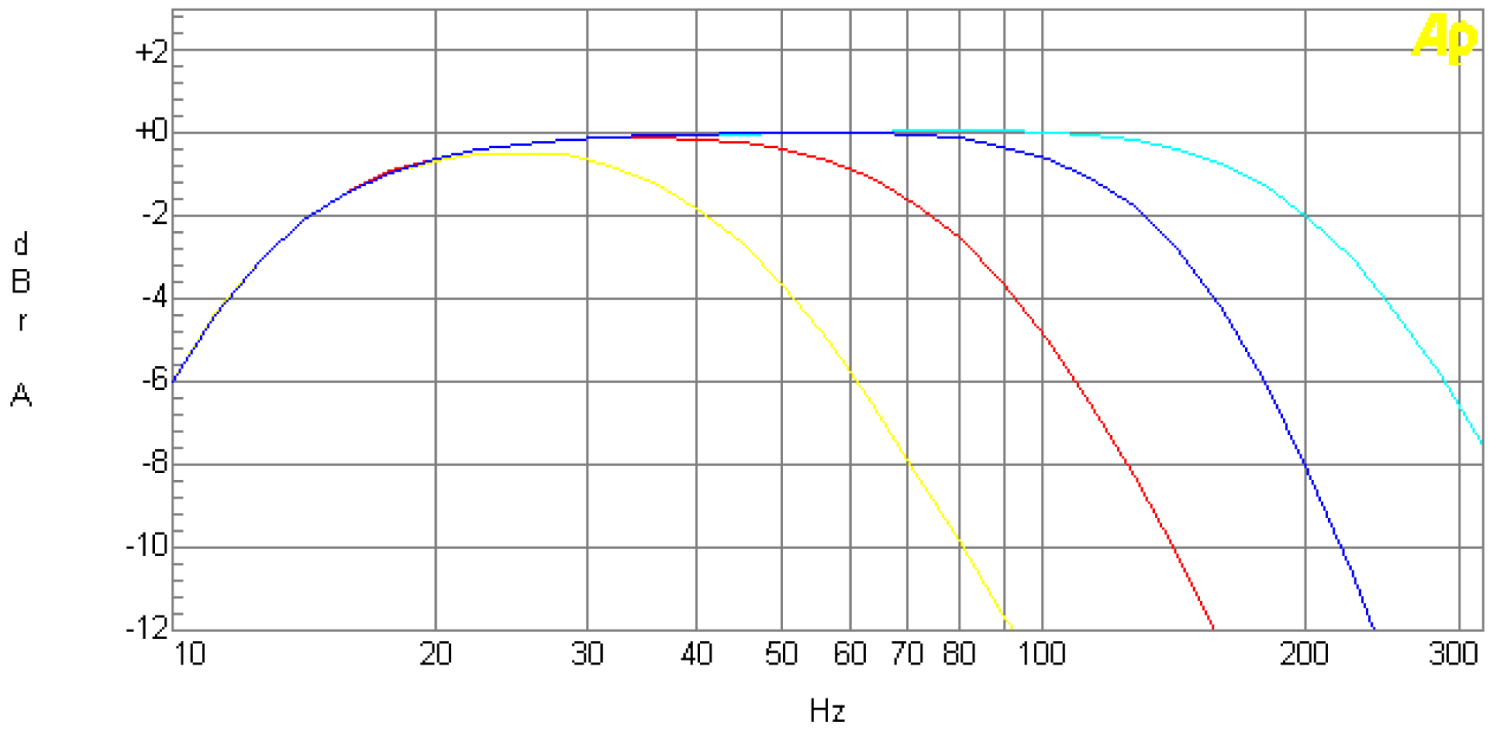


Chart 4. LPF response

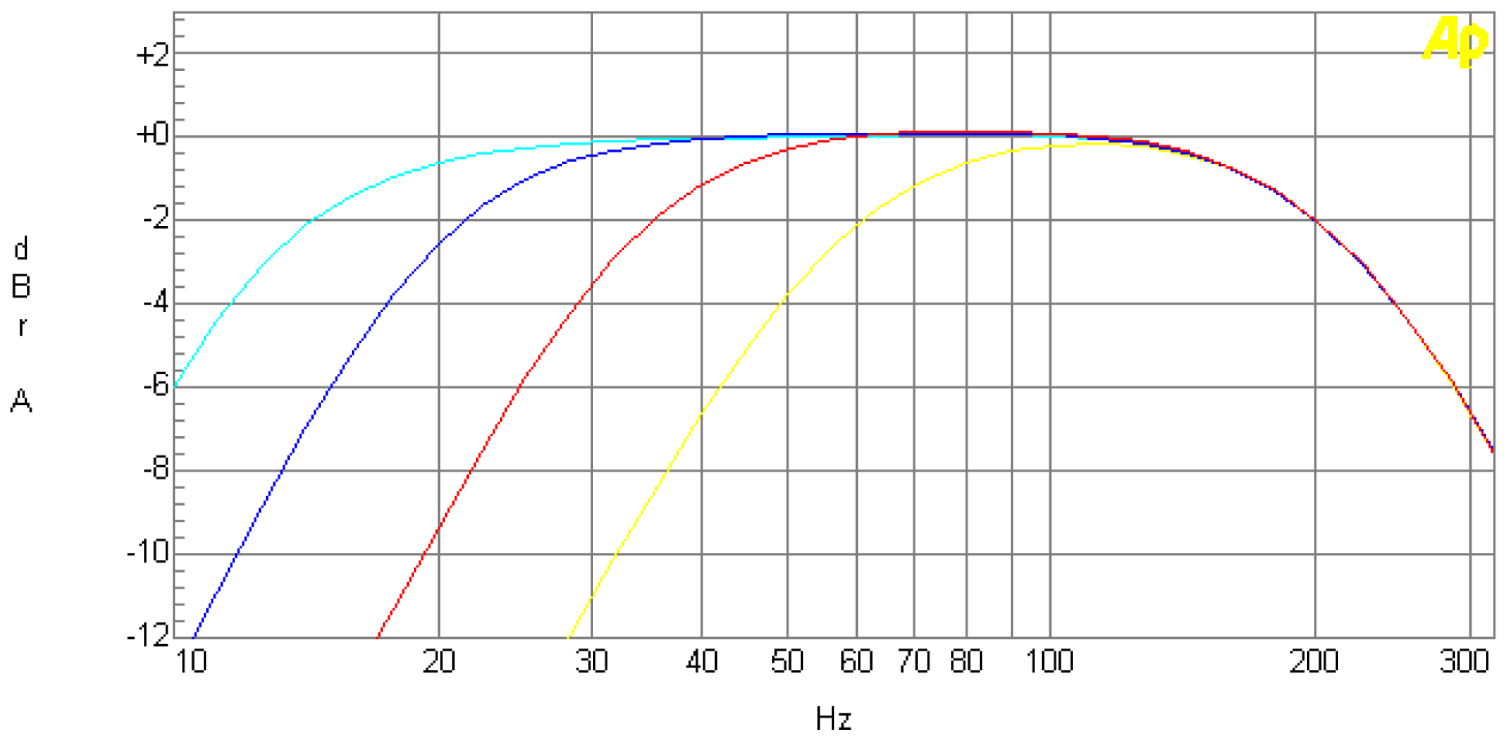
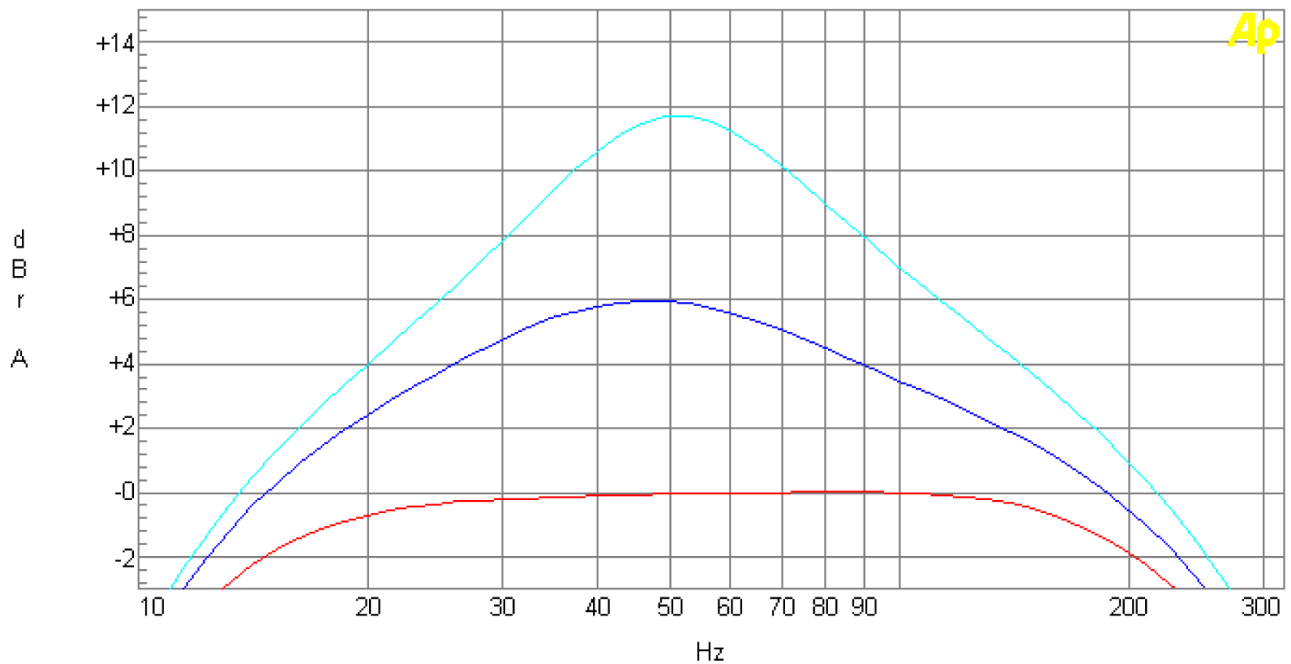


Chart 5. Subsonic Filter response

3.5 SUBSONIC LEVEL(0dB,6dB,12dB)



3.6 THD+N

THD+N=0.16% @ 30W output power with 4ohm load.

3.7 Input level

0.2V~5V

3.8 S/N Ratio

>75dB

3.9 Protection System

1. Overload:

Protect less than 0.8 Ohm loads at full-scale output power.

2. Short Circuit:

Full rated power short circuit protect test: passed.

Full rated power long last short circuit test: 10 minutes passed.

3. Over temperature:

Protect while inner temperature over 85 degree C.

4. Over/Low voltage:

Protect while power supply voltage over 16.5V or lower than 8.6V.

3.10 Idle current and Efficiency:

1. Idle current: 1.0A
2. Efficiency: 88% at THD+N=1% (4ohm)

3.11 Dimension

This amplifier's size is at 140mmX261mmX54mm(W,L,H).