

LC Audio Technology 175*119*67mm Heat Sink Test

Test Setup

A 50W aluminium case power resistor is mounted on the [heat sink](#) with thermal paste.

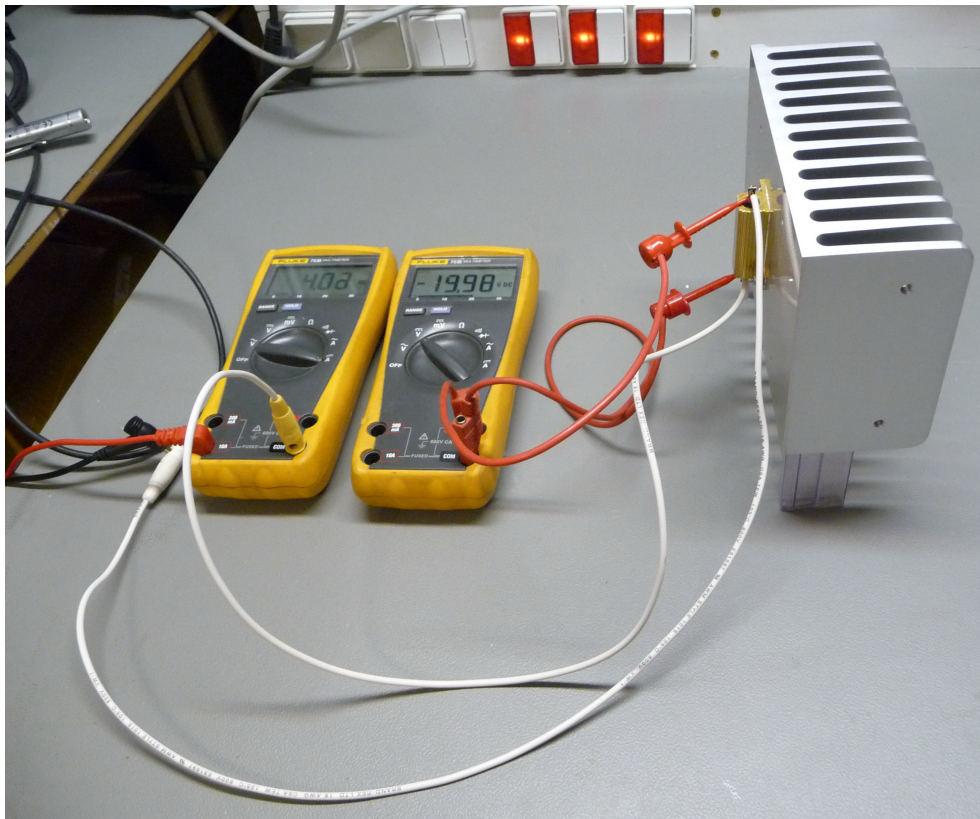
The heat sink is placed on two plastic spacers (=45mm) or four rubber feet (=13mm) over a table surface.

Power is applied from an external power supply.

Temperatures are measured with an infrared thermometer (Base Tech Mini1) at three points:

- 1) Right next to the power resistor
- 2) In the groove directly opposite the resistor
- 3) On the centre of the end of the heat sink

The thermometer is moved around the target points for maximum reads. The test is terminated when the temperatures are stable.



Results

H	Power	I	U	t_amb	t_1	t_2	t_3	Δt_max	Result
4.5 cm	80.5 W	4.03 A	19.98 V	22.8 °C	70.5 °C	73.0 °C	61.8 °C	50.2 °C	0.62 °C/W
4.5 cm	50.6 W	3.19 A	15.85 V	22.4 °C	55.6 °C	56.1 °C	49.5 °C	33.7 °C	0.67 °C/W
1.3 cm	50.6 W	3.19 A	15.85 V	22.3 °C	56.1 °C	57.1 °C	50.2 °C	34.8 °C	0.69 °C/W