6008

DESCRIPTION

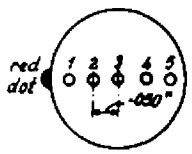
The 6008 is a sub-miniature pentode voltage amplifier for hearing-aids and other purposes, where small size, light weight and low battery drain are important.

Physical specifications

Filament	coated
Bulb	T2
Base	none
Maximum diameter	0.322"
Mounting position	any

Basing connections- JETEC basing designation 5J

1. Plate
2. Grid No.2
3. + filament
4. Grid No.1
5. - filament

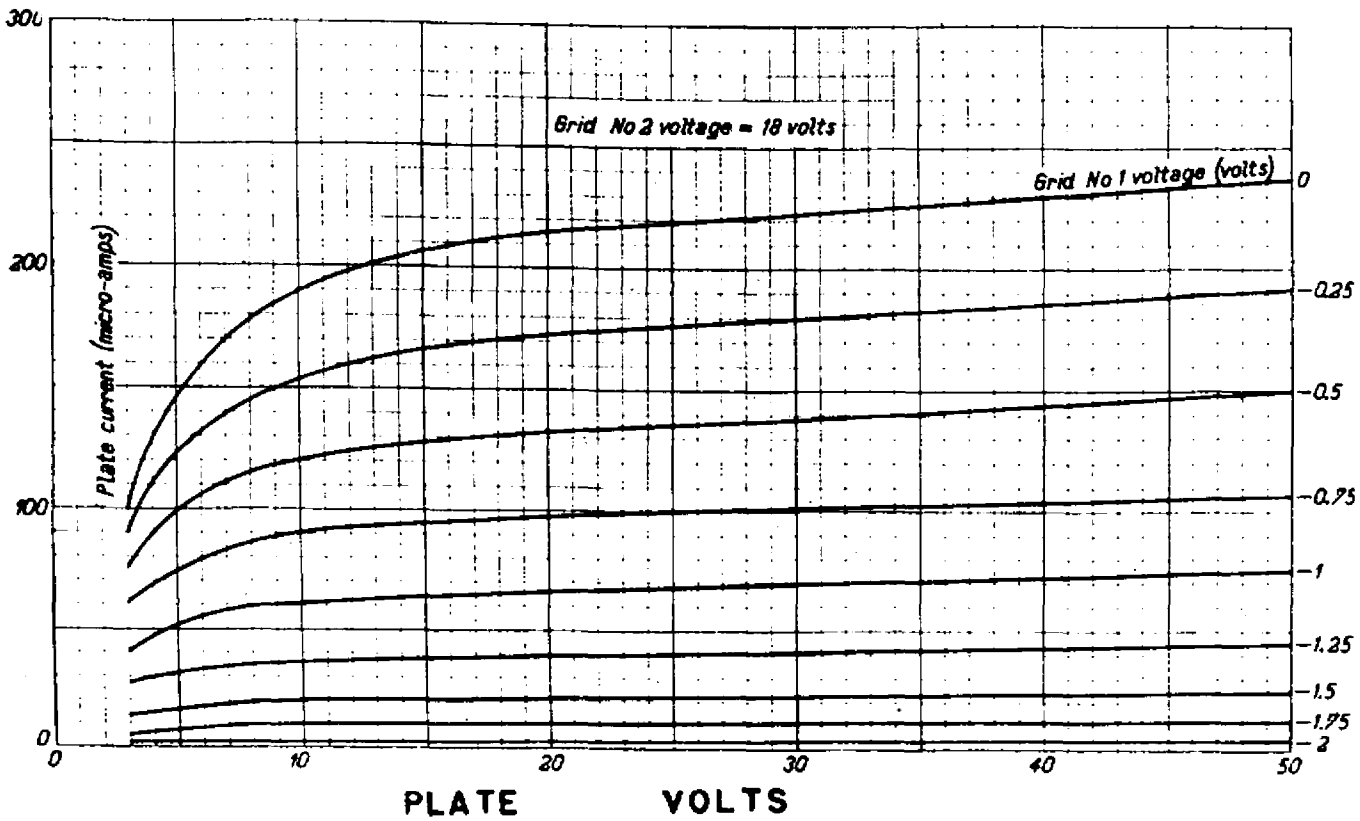


Wire length	0.2"
Spacing	0.05"
Diameter	0.016"

The 6008 has flexible silvered terminal leads which may be soldered directly to the circuit elements. The wires are arranged in a straight line so that, if they are cut off to a length of 0.2" the tube can be fitted in a standard 5-pin sub-miniature socket.

General electrical data

Filement voltage	0.625 volt DC
Filament current	13.3 ma



from RTMA release #1128, Jan. 30, 1953
sponsor: Amperex Electronic Corp.

Direct interelectrode capacitances

Grid No.1 to all other electrodes		1.5 μμf
Plate to all other electrodes		1.5 μμf
Plate to Grid No.1	max.	0.2 μμf

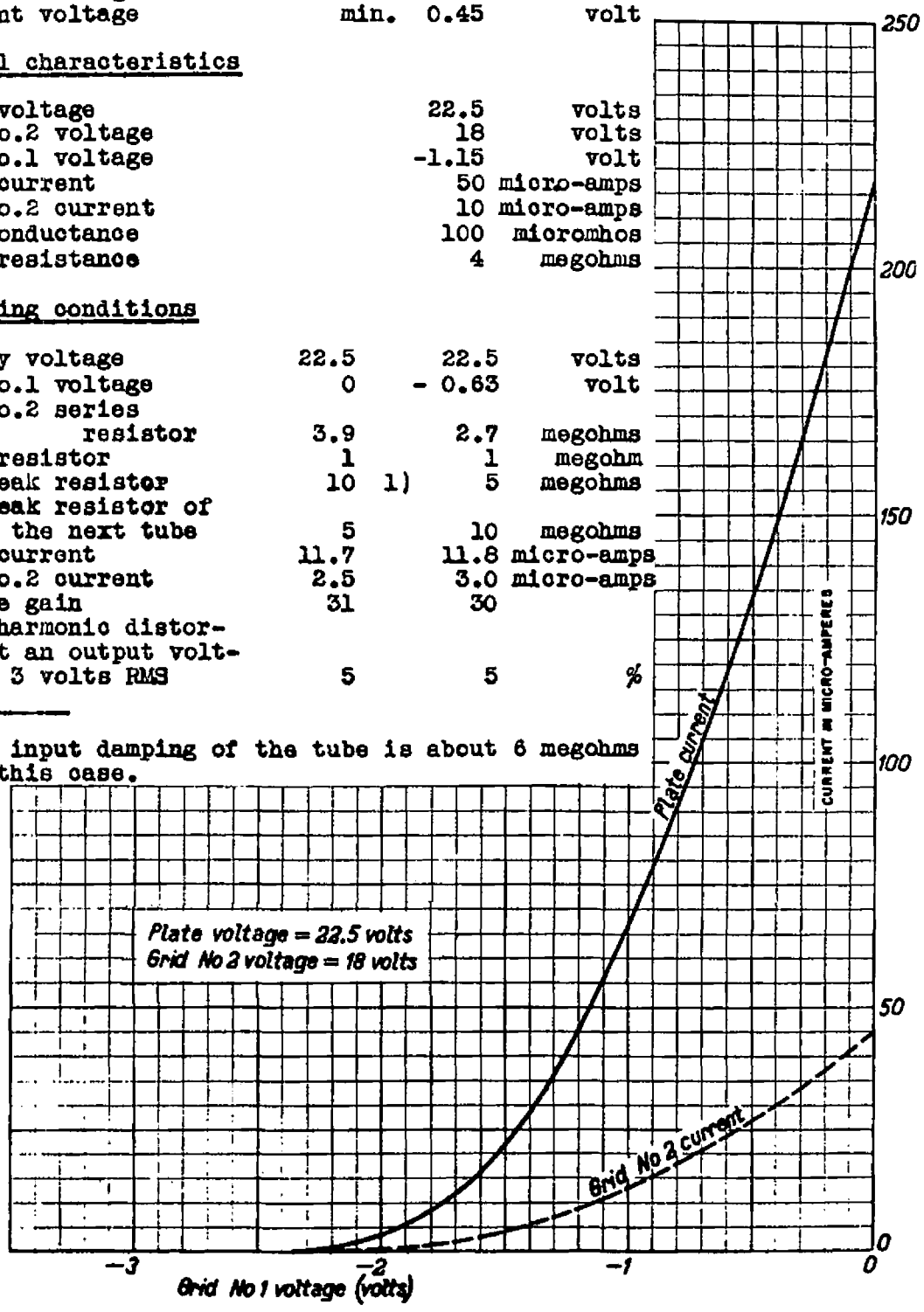
Maximum Ratings

Plate voltage		45	volts
Plate dissipation		1.5	milli-watt
Grid No.2 voltage		45	volts
Grid No.2 dissipation		0.5	milli-watt
Cathode current		75	micro-amps
Grid No.1 voltage (when grid No.1 current = + 0.3 micro-amp)		-0.2	volt
Circuit resistance between grid No.1 and filament		10	megohms
Filament voltage	max.	0.78	volt
Filament voltage	min.	0.45	volt

Typical characteristics

Plate voltage	22.5	volts
Grid No.2 voltage	18	volts
Grid No.1 voltage	-1.15	volt
Plate current	50	micro-amps
Grid No.2 current	10	micro-amps
Transconductance	100	micromhos
Plate resistance	4	megohms

Operating conditions

Battery voltage	22.5		22.5	volts
Grid No.1 voltage	0		- 0.63	volt
Grid No.2 series resistor	3.9		2.7	megohms
Plate resistor	1		1	megohm
Grid leak resistor	10	1)	5	megohms
Grid leak resistor of the next tube	5		10	megohms
Plate current	11.7		11.8	micro-amps
Grid No.2 current	2.5		3.0	micro-amps
Voltage gain	31		30	
Total harmonic distortion at an output voltage of 3 volts RMS	5		5	%

1) The input damping of the tube is about 6 megohms in this case.