

# AMPEREX 6007

## DESCRIPTION

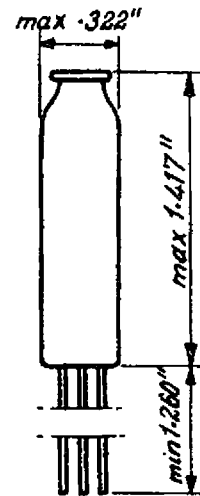
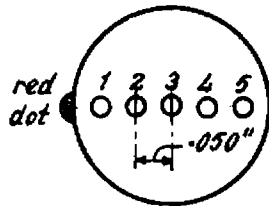
The 6007 is a subminiature pentode output amplifier for hearing-aids and other purposes, where small size, light weight and low battery drain are important.

## Physical specifications.

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

## Basing connections - JEDEC 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 6007 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

Filament voltage	1.25 volt DC
Filament current	13.3 ma

### Direct interelectrode capacitances

Grid No.1 to all other electrodes	2.5	μpf
Plate to all other electrodes	2.2	μpf
Plate to Grid No.1	max. 0.2	μpf

### Maximum ratings

Plate voltage	45	volts
Plate dissipation	25	milli-watts
Grid No.2 voltage	45	volts
Grid No.2 dissipation	6	milli-watts
Cathode current	600	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. 1.55	volt
Filament voltage	min. 0.9	volt

### Typical characteristics

Plate voltage	22.5	volts
Grid No.2 voltage	22.5	volts
Grid No.1 voltage	-0.2	volt
Plate current	475	micro-amps
Grid No.2 current	100	micro-amps
Transconductance	420	micromhos
Plate resistance	0.4	megohm

### Operating conditions as a single output amplifier

Battery voltage	22.5	volts
Plate load resistor	0.1	megohm
Grid leak resistor	10	megohms
Input voltage	0	0.45 volt (RMS)
Plate current	0.50	0.34 ma
Grid No.2 current	0.095	0.09 ma
Power output	0	1.8 milli-watt
Total harmonic dis- tortion	0	10 %
Battery voltage	45	volts
Plate load resistor	0.1	megohm
Grid leak resistor	3	megohms
Cathode resistor	5600	ohms
Input voltage	0	0.8 volt (RMS)
Plate current	0.42	0.42 ma
Grid No.2 current	0.08	0.11 ma
Power output	0	6 milli-watts
Total harmonic dis- tortion	0	10 %

Operating conditions as a push-pull amplifier  
(Class AB1)

Battery voltage	22.5	v	v
Plate load resistor (plate to plate)	0.12	megohm	
Grid leak resistor	5	megohms	
Input voltage	0	volt (RMS)	0.7
Plate current	0.97	ma	0.49
Grid No.2 current	0.21	ma	0.16
Power output	0	milli-watts	4.2
Total harmonic distortion	0	%	8.5

