

DESCRIPTION

AMPEREX 6007

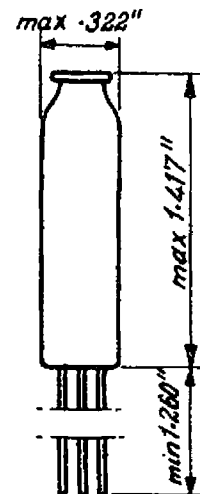
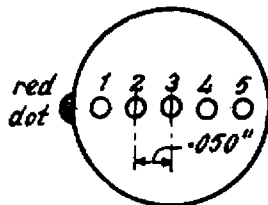
The 6007 is a subminiature pentode output amplifier for hearing-aids and other purposes, where small size, light weight and low battery drain are important.

Physical specifications.

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

Basing connections - 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 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 distortion	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 distortion	0	10 %

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

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

