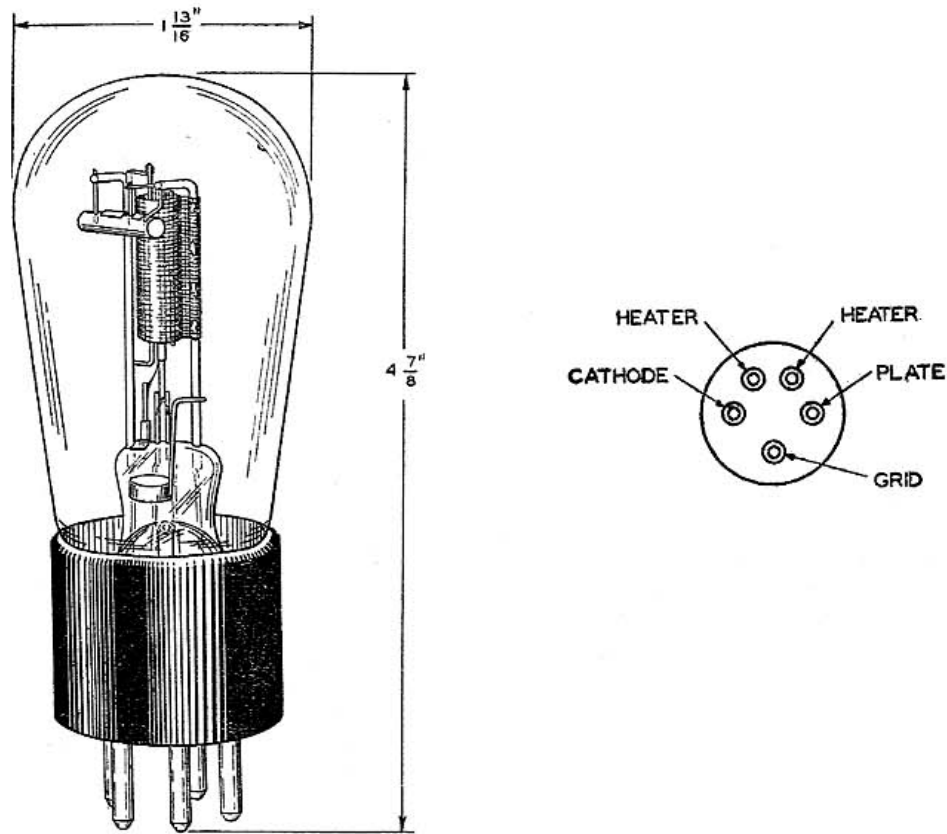


247A Vacuum Tube



Classification

The No. 247A Vacuum Tube is a general purpose tube having an indirectly heated cathode which permits operation of the heater element directly on alternating current. The tube is for use as an audio-frequency amplifier in intermediate stages but may also be used satisfactorily as a power amplifier tube for applications requiring small values of output power.

Base and Socket

The No. 247A Vacuum Tube employs a standard five-prong base suitable for use in a Western Electric No. 134A (cushion) or No. 137A (rigid) socket or similar type socket. The arrangement of electrode connections to the base terminals is shown above.

Rating and Characteristic Data

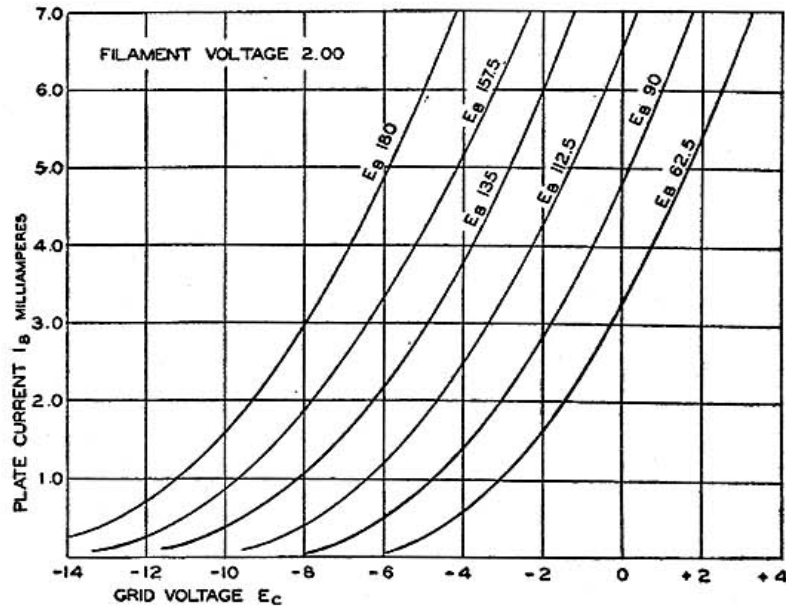
Heater Voltage.....	2 Volts, AC or DC
Average Heater Current.....	1.6 Amperes
Plate Voltage.....	135 180 Volts Maximum
Grid Voltage.....	-4.5 -7 Volts
Average Plate Current.....	3.25 3.80 Milliamperes
Average Plate Resistance.....	16,200 16,000 Ohms
Average Amplification Factor.....	14.9 14.6

Approximate Direct Interelectrode Capacities

Plate to Grid.....	3.2 MMF
Plate to Cathode.....	2.7 MMF
Grid to Cathode.....	3.4 MMF

Average Static Characteristics

The accompanying curves give the average static characteristics of the No. 247A Vacuum Tube.



General Features

The low plate current drain of the No. 247A Vacuum Tube makes it particularly adaptable for use in intermediate stages of audio-frequency amplifiers when resistance coupling is used. However, its plate resistance is sufficiently low that it is also well adapted for use with transformer coupling.

The total electron emission of the cathode is very large compared with the maximum space current drain. This together with special features of design and careful control of the manufacturing processes enables this tube to meet exacting service requirements throughout a very long life.