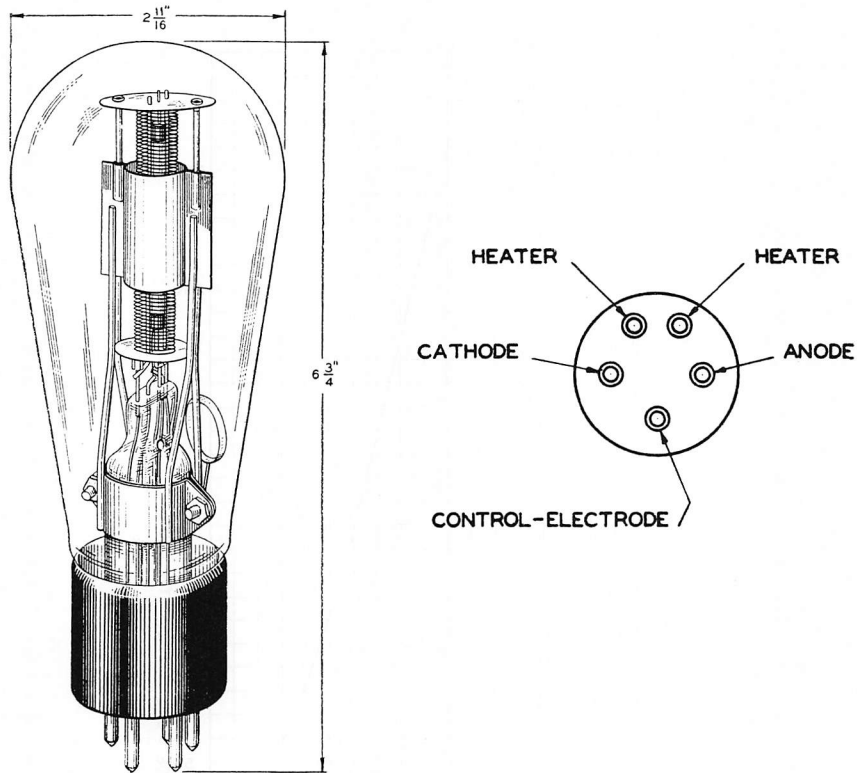


277A Vacuum Tube



Classification

The No. 277A Vacuum Tube is a three-element tube which employs an indirectly heated cathode and contains argon gas at a low pressure. It is intended for use in special circuits as a relay or trigger-action device.

Base and Socket

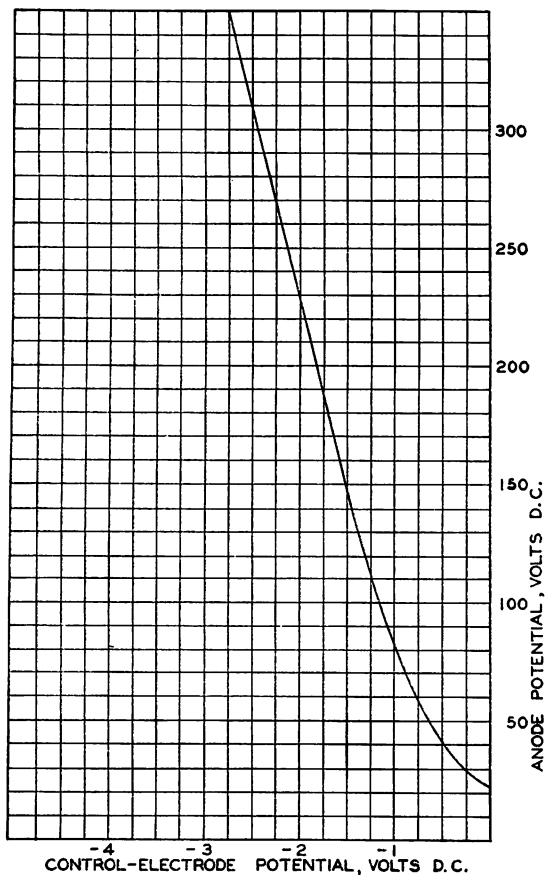
The No. 277A Vacuum Tube employs a standard five-prong, thrust-type base suitable for use in a Western Electric No. 137A Socket or similar type socket. The arrangement of electrode connections to the base terminals is shown above.

Rating and Characteristic Data

Heater Voltage	5 Volts, AC
Nominal Heater Current	2 Amperes
Anode-Cathode Potential Drop when Conducting	10 to 20 Volts
Maximum Instantaneous Space Current	500 Milliamperes
Maximum Instantaneous Potential between Anode and Control-Electrode	350 Volts
Maximum Potential between Cathode and Heater	12 Volts

Breakdown Characteristics

A typical curve relating the critical control-electrode potential to the anode potential is given in the accompanying chart. This characteristic may vary from tube to tube and during the life of a given tube.



General Features

The No. 277A Vacuum Tube is primarily a rectifier of low internal impedance whose conduction cycle is determined by the relative instantaneous control-electrode and anode potentials. The special treatment of electrode elements and the use of argon gas whose pressure remains practically constant over wide temperature ranges are outstanding design features. The above qualities insure uniform and reproducible characteristics essential to various circuit applications such as: a controlled frequency oscillator giving a square wave form, a peak voltmeter or volume level-indicator and a variable voltage rectifier.