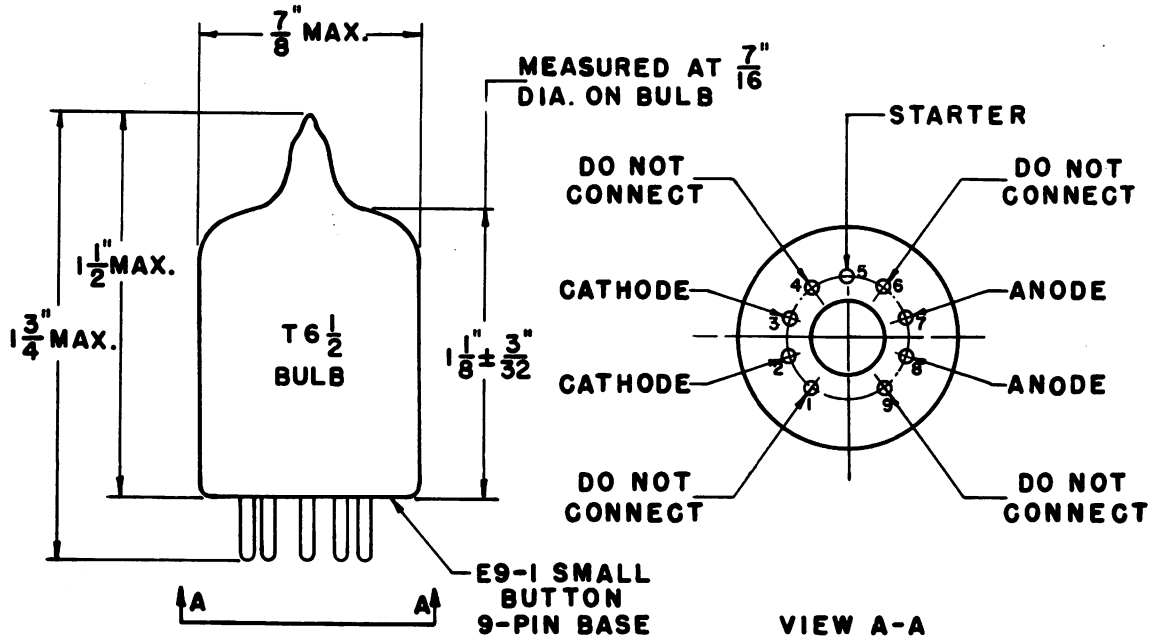


**ADVANCE ELECTRON TUBE DATA SHEET**  
**WESTERN ELECTRIC 432A ELECTRON TUBE**



**DESCRIPTION**

The 432A is a three-electrode inert-gas filled cold cathode tube designed primarily for use as a voltage reference tube. This tube has exceptionally stable characteristics.

**CHARACTERISTICS**

Cathode Current . . . . .	4 to 8 milliamperes
Anode Voltage Drop . . . . .	100 volts
Regulation, Max. (4 to 6 Milliamperes D-C). . . . .	0.5 volt

RATINGS, Absolute Values

## Cathode Current

Maximum . . . . .	8 milliamperes
Minimum . . . . .	4 milliamperes
Maximum Inverse Starter or Anode Current . . . . .	0.0 milliampere
Starter Current (Minimum). . . . .	0.2 milliampere
Ambient Temperature Limits . . . . .	-55 to + 60 centigrade

ELECTRICAL DATA

	<u>Min.</u>	<u>Bogey</u>	<u>Max.</u>
Anode Breakdown Voltage . . . . .	---	---	160 volts
Anode Voltage Drop at 6 Milliamperes (D-C) <sup>1</sup> . . .	99	100	103 volts
Starter Breakdown Voltage . . . . .	---	---	200 volts
Starter Voltage Drop . . . . .	---	115	--- volts
Required Transfer Current at 110 Anode Volts . .	200	---	--- microamperes
Regulation (4 to 6 Milliamperes, D-C). . . . .	---	---	0.5 volt
Temperature Sensitivity of Anode Voltage Drop			
Anode Current, 4 Milliamperes (D-C) . . . . .	---	-0.01	--- volt/c
Anode Current, 8 Milliamperes (D-C) . . . . .	---	-0.02	--- volt/c
Fluctuation <sup>2</sup> . . . . .	---	---	0.1 volt
Stability <sup>3</sup> . . . . .	---	---	0.3 volt

MECHANICAL DATA

Mounting Position . . . . .	Any
Net Weight, Approximate . . . . .	0.3 ounce
Bulb . . . . .	T 6-1/2
Base . . . . .	Small Button 9-pin

**Note 1:** These values are for new tubes. The stability characteristic should be considered during tube life.

**Note 2:** The anode voltage drop variation during a short period of time (one to ten minutes), with the tube operating at one value of current and temperature within its ratings, will not exceed the above stated maximum value.

**Note 3:** The drift of anode voltage drop over a period of 1000 hours, with the tube operating at one value of current and temperature within its ratings, will not exceed the above stated maximum value.

A development of Bell Telephone Laboratories, the research laboratories of the American Telephone and Telegraph Company and the Western Electric Company.