
ELECTRON TUBE DATA SHEET
WESTERN ELECTRIC 249B ELECTRON TUBE



DESCRIPTION

The 249B is a mercury-vapor diode for use in high voltage rectifier circuits. The latest gettering techniques and materials are employed in this tube to insure greater service life.

MAXIMUM RATINGS

Peak Anode Voltage	7500 volts
Average Cathode Current	0.64 ampere

FILE: RECTIFIER SECTION
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MAXIMUM RATINGS, ABSOLUTE VALUES

Peak Inverse Anode Voltage	7500 volts
Cathode Current	
Peak	2.5 amperes
Average	0.64 ampere
Surge (maximum duration 0.1 second)	25 amperes
Averaging Time	5 seconds
Condensed Mercury Temperature	+20 to +70 centigrade

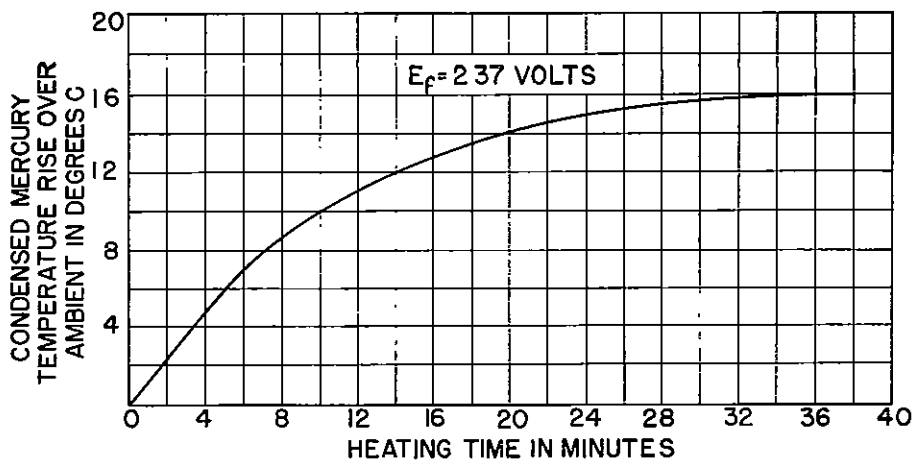
ELECTRICAL DATA

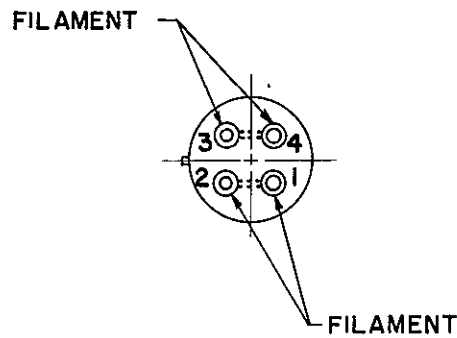
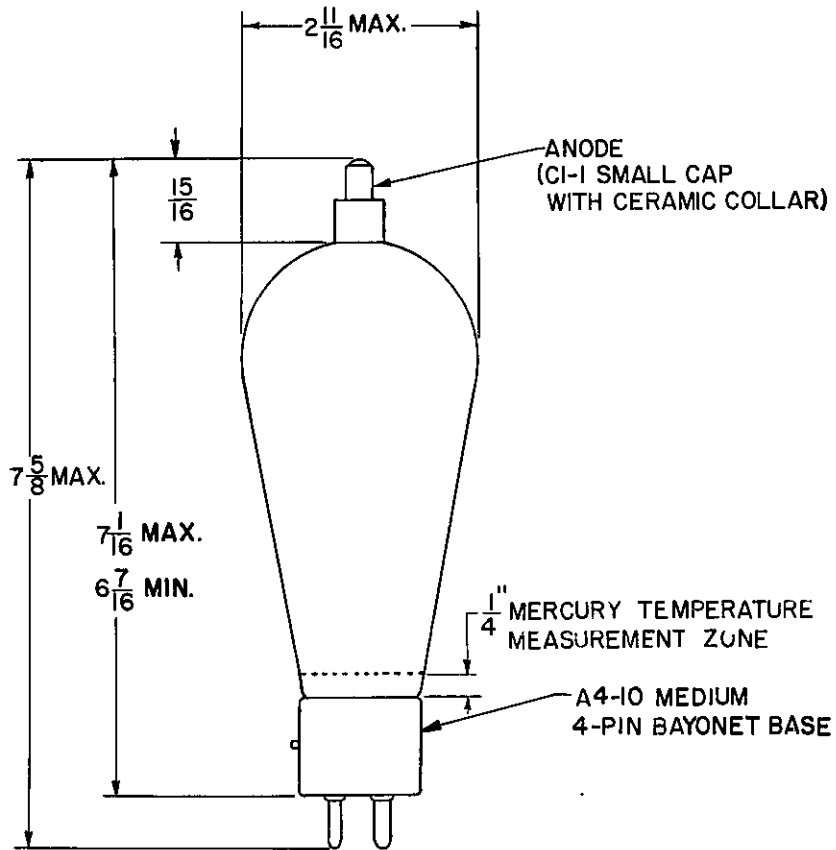
	<u>Min.</u>	<u>Bogey</u>	<u>Max.</u>
Filament Voltage	2.37	2.5	2.62 volts
Filament Current at 2.5 volts	----	7.5	8.25 amperes
Filament Heating Time Required ¹	15	---	---- seconds
Anode Voltage Drop	----	15	---- volts
Critical Anode Voltage	----	---	50 volts

MECHANICAL DATA

Type of Cooling	Convection
Equilibrium Condensed Mercury Temperature	
Rise Above Ambient, Approximate	
At Full Load	20 centigrade
At No Load	16 centigrade
Mounting Position ²	Vertical, Base end down
Net Weight, Approximate	3 ounces

1. Mercury may become deposited on the tube elements in shipment, storage or handling. When using the tube for the first time, or after handling, a filament heating period of 15 to 30 minutes should be allowed to properly distribute the mercury.
2. Sufficient clearance should be allowed around the tube to insure free air circulation.





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

Western Electric