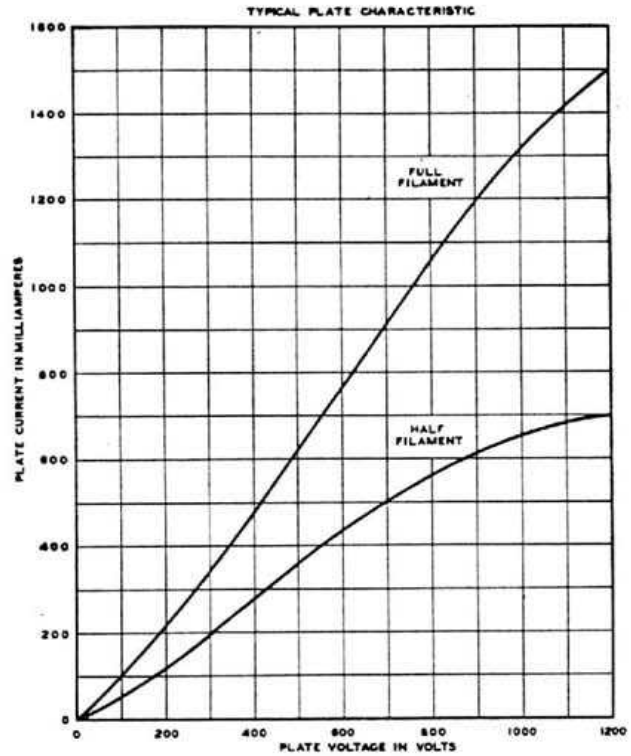
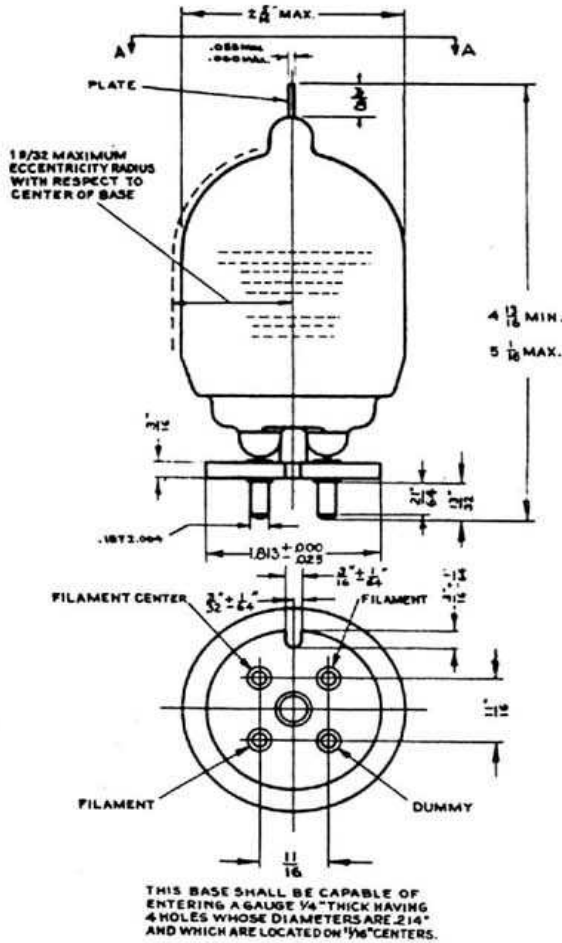


TECHNICAL INFORMATION
WESTERN ELECTRIC 705A (378A) VACUUM TUBE



THIS BASE SHALL BE CAPABLE OF ENTERING A GAUGE $\frac{1}{4}$ " THICK HAVING 4 HOLES WHOSE DIAMETERS ARE $.214$ " AND WHICH ARE LOCATED ON $\frac{1}{16}$ " CENTERS.

CLASSIFICATION

This vacuum tube is a high vacuum filamentary air cooled diode intended primarily for use as a rectifier in high voltage circuits. The electrodes are supported directly from the hard glass envelope in such a manner that adequate cooling of all seals is accomplished and the elimination of internal insulators insures satisfactory performance under high voltage conditions.

MOUNTING

This tube is provided with a large, four prong, wafer type base for use in a Western Electric 152A or any similar socket. The plate terminal is at the top of the envelope. The preferred position for mounting is vertical and a free circulation of air around the bulb should be provided to assure proper cooling.

FILAMENT

Thoriated tungsten designed for operation on a voltage basis. The tube may be operated using only half the filament but it is not recommended that the two filament halves be operated in parallel.

	Half Filament	Full Filament
Filament Voltage	2.5	5.0 volts
Nominal Filament Current	5.0	5.0 amperes
Nominal Filament Emission	.6	1.25 amperes

RATINGS

Rectifier

Maximum Peak Inverse Voltage	30,000	30,000 volts
Maximum Average Plate Dissipation	60	60 watts
With Forced Air Cooling	75	75 watts
Maximum Average Plate Current Per Tube:		
Peak Inverse Voltage not greater than 15,000 Volts.	75	150 Milliamperes
Peak Inverse Voltage of 30,000 Volts	50	100 Milliamperes

For Peak Inverse Voltages between

15,000 and 30,000, Max. Ave. Plate Current is equal to
 $100 + 3.33 (30 - \text{Peak Inverse Ev})$ milliamperes for full
filament or 1/2 this value for half filament

Surge Limiting Diode

*Filament Voltage	5.5 volts
Maximum Peak Inverse Voltage	35,000 volts
Maximum Peak Forward Voltage	10,000 volts
Maximum Average Plate Power	75 watts

*Maximum emission is desired for surge limiting diode applications. When 5.5 volts are applied the filament life may be reduced to 1/4 the value obtained when 5.0 volts are applied.

FOR IMMEDIATE REFERENCE ONLY
REISSUES WILL NOT BE FURNISHED
UNLESS SPECIFICALLY REQUESTED