

**RECTIFIER**  
**FULL-WAVE, HIGH VACUUM**

*Western Electric*

**DESCRIPTION**

The 345A is a full-wave rectifier with indirectly heated cathodes. It is designed to supply direct current from an alternating current source or to rectify radio-frequency currents for feedback purposes in broadcast transmitters.

**CHARACTERISTICS**

Heater Voltage	6.3 volts
Maximum Plate Voltage (RMS) per Plate	400 volts
Maximum D-C Output Current	100 milliamperes



**GENERAL CHARACTERISTICS****ELECTRICAL DATA**

Heater Voltage	6.3 volts
Heater Current	1.0 ampere

**MECHANICAL DATA**

Cathode	Coated unipotential
Bulb	ST12
Base	Small 5-pin
Mounting Position	Any
Dimensions and pin connections shown in outline drawing on Page 4	

**MAXIMUM RATINGS, Design-Center Values**

Peak Inverse Voltage	1250 volts
Peak Plate Current per Plate	300 milliamperes
Peak Transient Plate Current per Plate	1.0 ampere
Peak Heater-Cathode Voltage	450 volts

**With Choke-Input Filter:**

A-C Plate Voltage per Plate (RMS)	400 volts
D-C Output Current	100 milliamperes
Minimum Input-Choke Inductance	4 henrys

**With Condenser-Input Filter:**

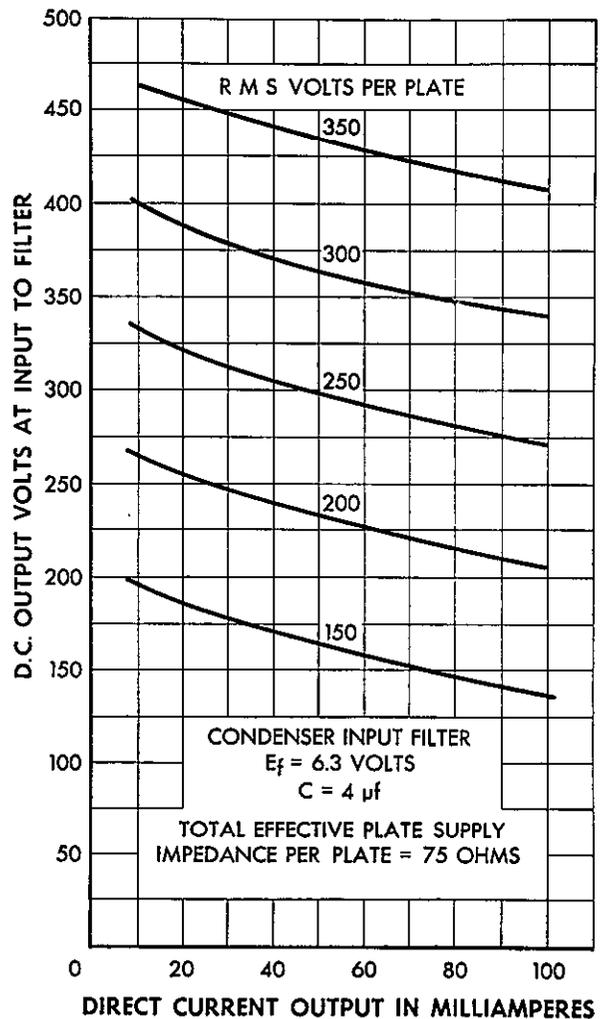
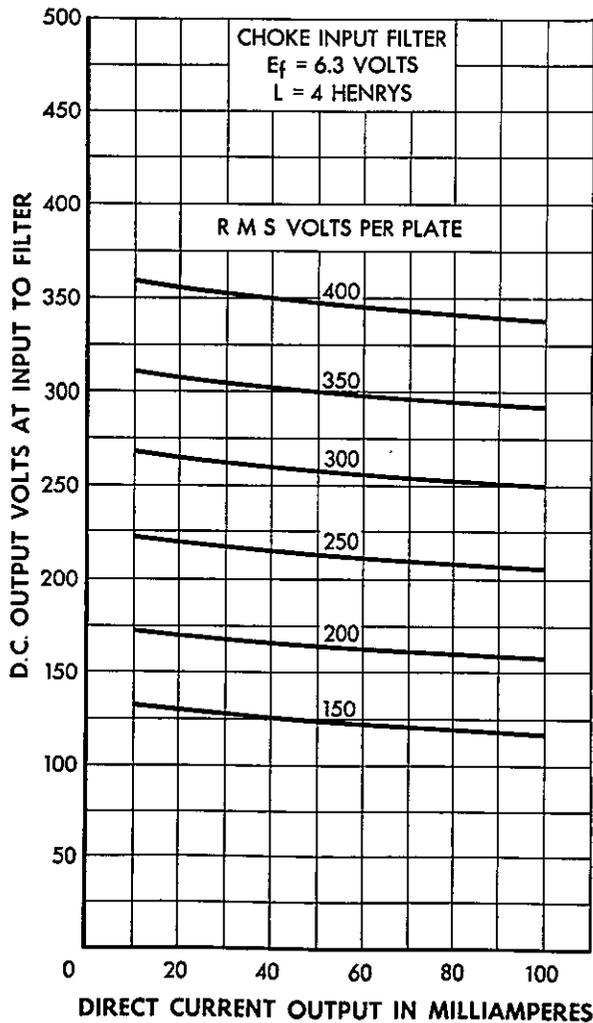
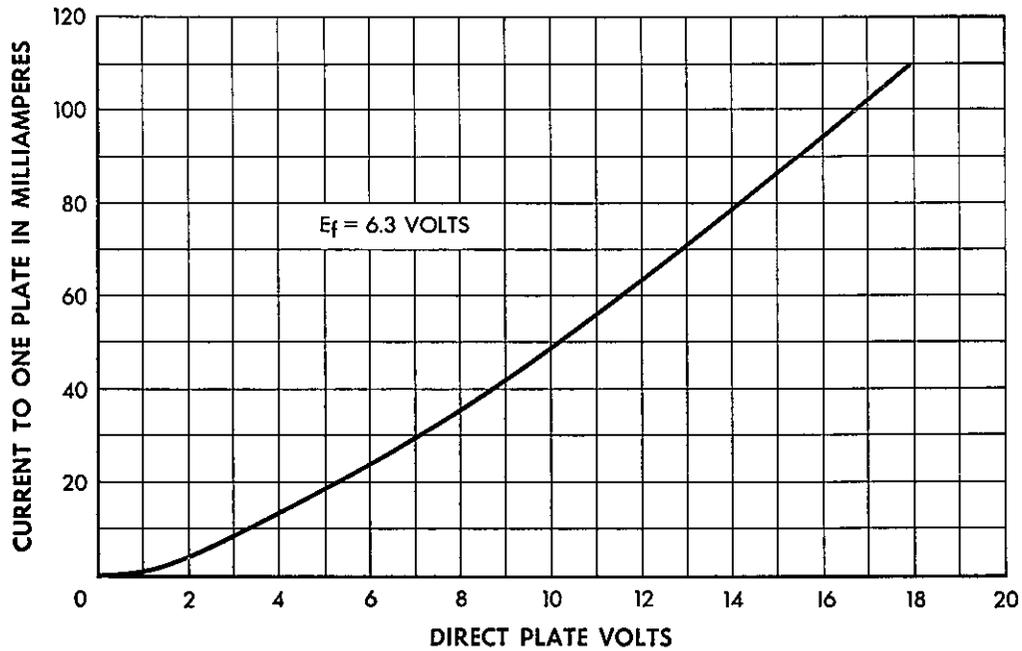
A-C Plate Voltage per Plate (RMS)	350 volts
D-C Output Current	100 milliamperes
Minimum Total Effective Plate-Supply Impedance per Plate	75 ohms

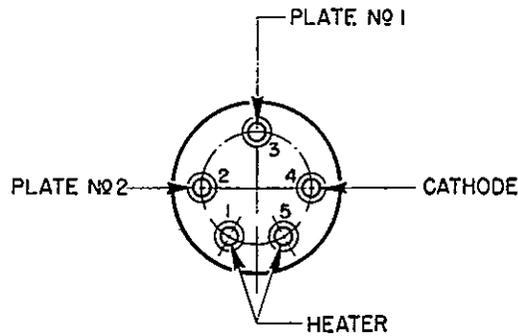
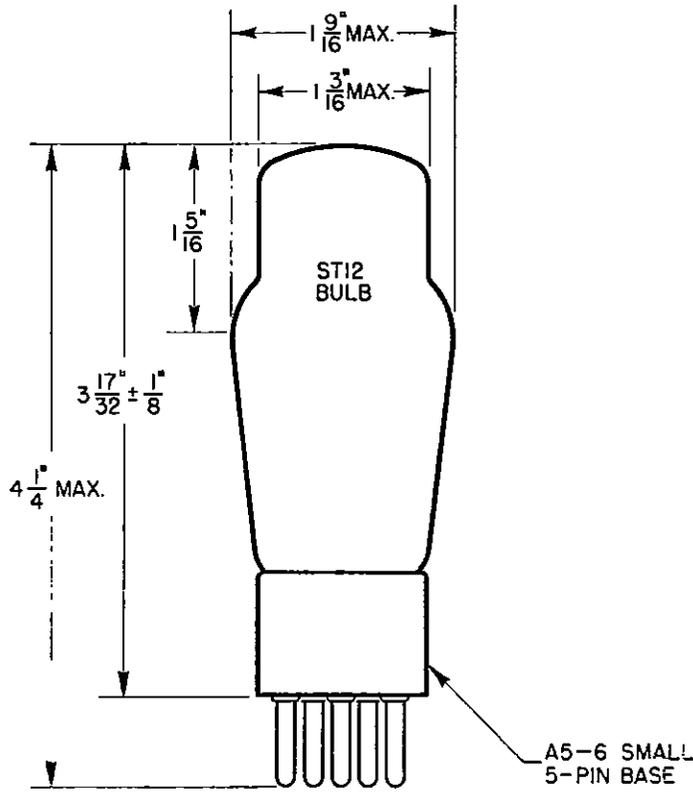
**TYPICAL OPERATING CONDITIONS****With Choke-Input Filter:**

A-C Plate Voltage per Plate (RMS)	350 volts
D-C Output Current	100 milliamperes
D-C Output Voltage, Approximate, at Input to Filter	290 volts
Filter Input Choke	6 henrys

**With Condenser-Input Filter:**

A-C Plate Voltage per Plate (RMS)	300 volts
D-C Output Current	90 milliamperes
D-C Output Volts, Approximate, at Input to Filter	340 volts
Total Effective Plate-Supply Impedance per Plate	150 ohms
Filter Input Condenser	4 microfarads





## Western Electric

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