

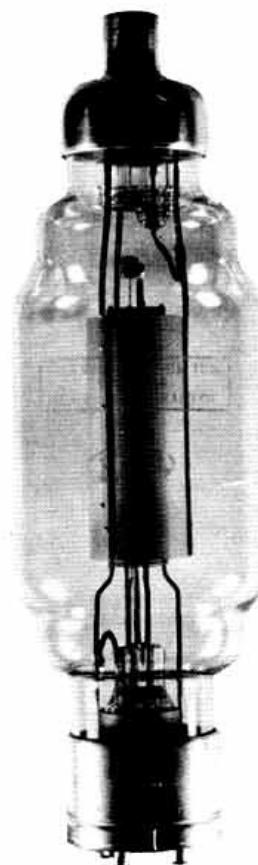
**FEDERAL TELEGRAPH CO.**

Federal Type F-102-A Vacuum Tube

**RATINGS AND DATA**

Main Use	General Purpose
No. of Electrodes	3
Filament Voltage	10 volts
Current	11 amperes
Type	Tungsten
Average Characteristic Values calculated at Eb = 1000, Ec = 0, Ef = 10 volts.	
Plate Current	.150 amperes
Amplification Factor	8
Plate Resistance	5500 ohms
Mutual Conductance	1450 micromhos
Approximate Direct Inter-electrode Capacities	
Plate to Grid	7 mmf.
Grid to Filament	3 mmf.
Plate to Filament	2 mmf.
Overall Dimensions	
Maximum Length	11 $\frac{1}{8}$ inches
Minimum Length	10 $\frac{7}{8}$ inches
Maximum Diameter	3 $\frac{1}{8}$ inches
Type Base	Standard 50 Watt
Mounting Socket	Standard 50 Watt and Anode Clip
Type of Cooling	Air
Operating Limits	
Maximum Plate Voltage	3000 volts
Maximum D.C. Plate Current	.225 amperes
Maximum Plate Dissipation	175 watts
Maximum R.F. Grid Current	8 amperes
Maximum D.C. Grid Current	.065 amperes

The above information by no means represents exact conditions of operation to be imposed for any particular situation. Tubes are used under many widely different conditions and consequently the manufacturer should be consulted for information regarding characteristics for design purposes.



FEDERAL type F-102-A is a ruggedly constructed medium power tube having an unusually wide range of application as oscillator, modulator and Radio Frequency amplifier. The anode is capable of 175 Watts dissipation. Pure tungsten filament enables the F-102-A to withstand abuse under which the average tube would become gassy or lose its emission.

**FEDERAL TELEGRAPH CO.**200 Mt. Pleasant Ave.  
Newark, N. J.

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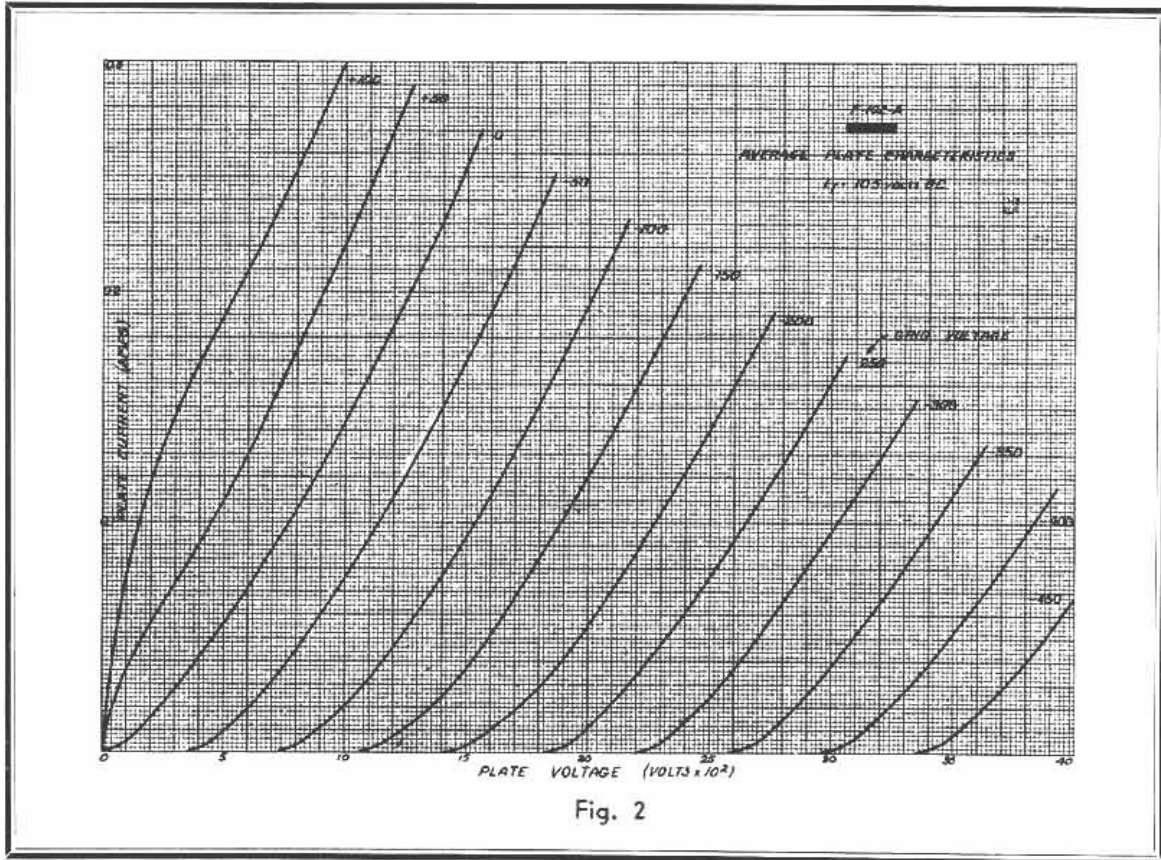
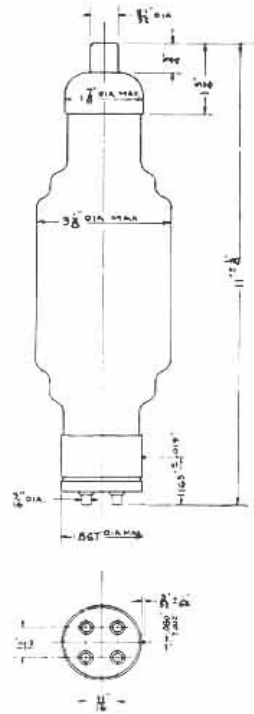


Fig. 2

Average Characteristics

Fig. 1



Outline drawing