

FEDERAL

F-131-A TRANSMITTING TUBE



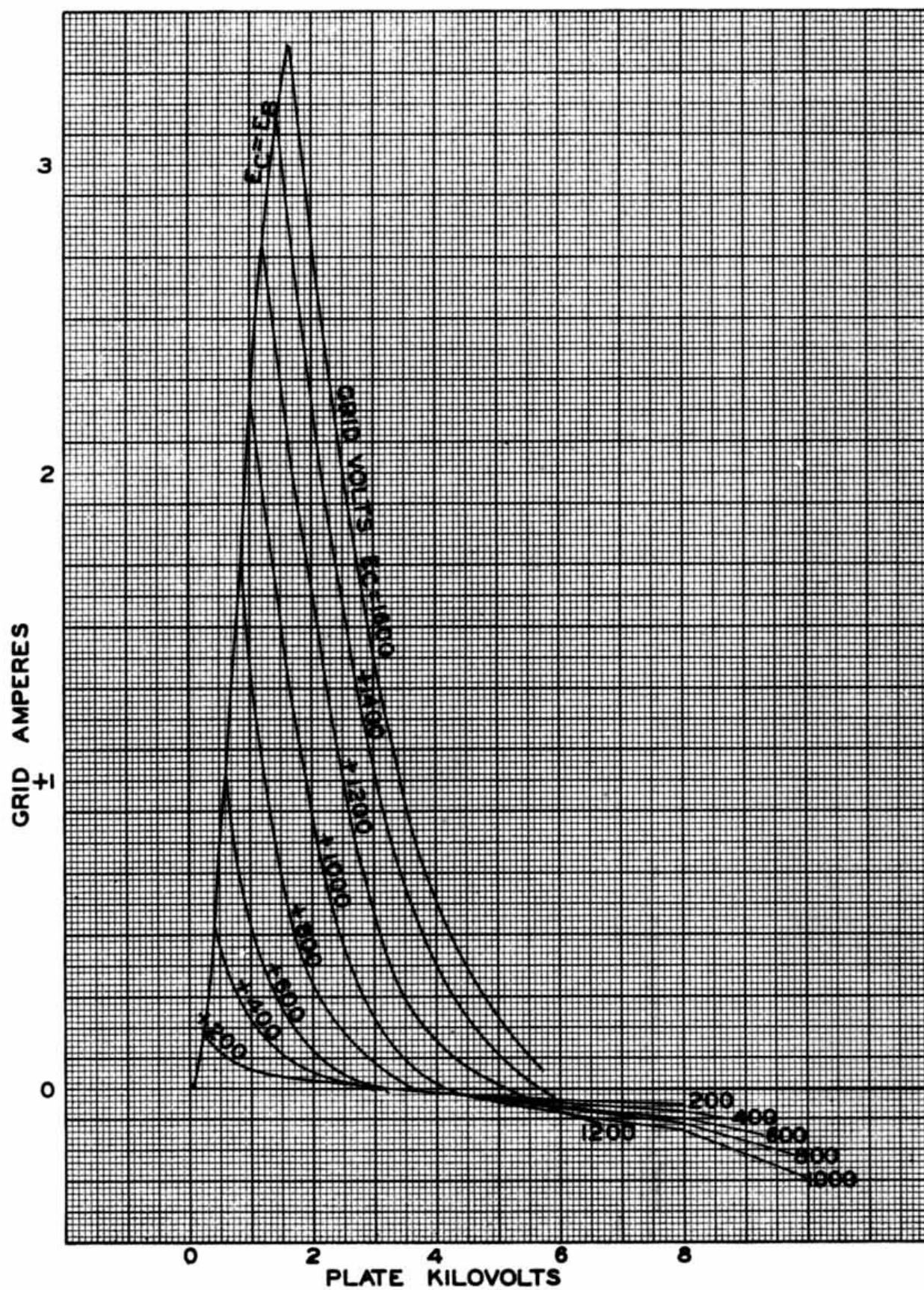
TECHNICAL DATA

Main Use	R-F Power Amplifier, Oscillator
Number of Electrodes	3
Filament Voltage	20 volts
Current	71 amperes
Type	Tungsten
Thermionic Emission	13.5 amperes
Average Characteristic Values calculated at $E_b = 10000$, $I_b = 0.9$ ampere, $E_f = 20$ volts.	
Grid Voltage (approximate)	0 volts
Amplification Factor	40
Mutual Conductance	6900 micromhos
Plate Resistance	5800 ohms
Approximate Direct Inter-electrode Capacitances	
Plate to Grid	28 mmf.
Grid to Filament	20 mmf.
Plate to Filament	2.5 mmf.
Type of Cooling	Water
Water Jacket	Standard or Federal Type 1005

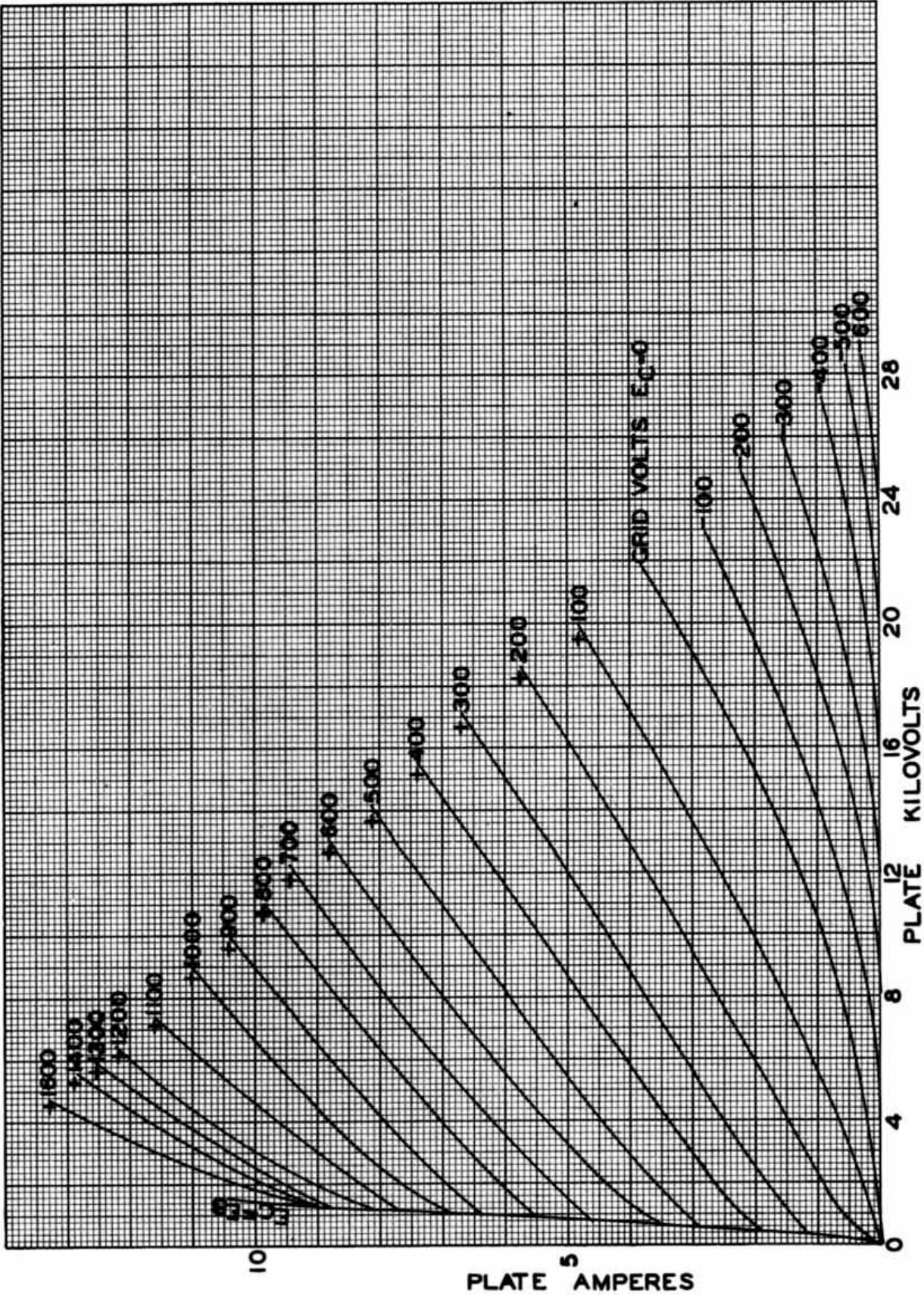
The information above and in the following pages by no means represents exact conditions of operation to be imposed for any particular situation. Since tubes are used under many widely different conditions the manufacturer will gladly furnish information regarding characteristics for design purposes.

Manufactured by
FEDERAL TELEGRAPH CO.
200 Mt. Pleasant Avenue Newark, N. J., U.S.A.

AVERAGE GRID CHARACTERISTICS F-131-A Transmitting Tube



AVERAGE PLATE CHARACTERISTICS F-131-A Transmitting Tube



F-131-A Transmitting Tube
For maximum frequency of 4.0 megacycles

(Carrier conditions per tube for use with modulation factor up to 1.0)

(Carrier conditions per tube for use with modulation factor up to 1.0)

(Key-down conditions per tube without modulation)*

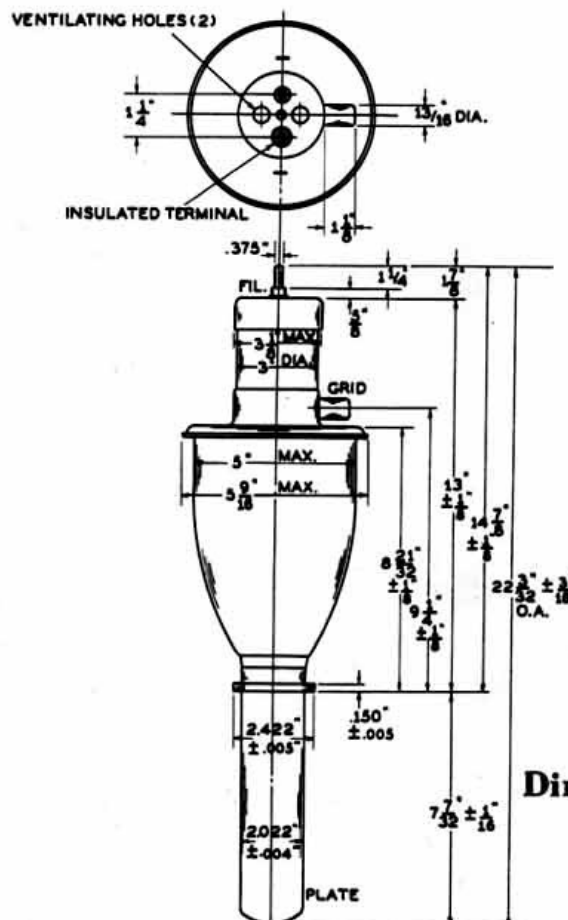
D-C Plate Voltage	20000 volts
D-C Grid Voltage	-5000 volts
D-C Plate Current	3.0 amperes
D-C Grid Current	0.30 ampere
R-F Grid Current	40 amperes
Plate Input	50000 watts
Plate Dissipation	25000 watts

F-131-A Transmitting Tube

(Carrier conditions per tube for use with modulation factor up to 1.0)

Filament Voltage	20 volts
D-C Plate Voltage	17500 volts
D-C Grid Voltage	-430 volts (approx.)
Peak R-F Grid Input Voltage	760 volts (approx.)
D-C Plate Current	1.55 amperes
D-C Grid Current	0.021 amperes
Driving Power*	28 watts (approx.)
Load Impedance	2780 ohms
Power Output	8250 watts (approx.)

*At crest of A-F cycle



Dimensional Data