

FEDERAL

F-343-R TRANSMITTING TUBE



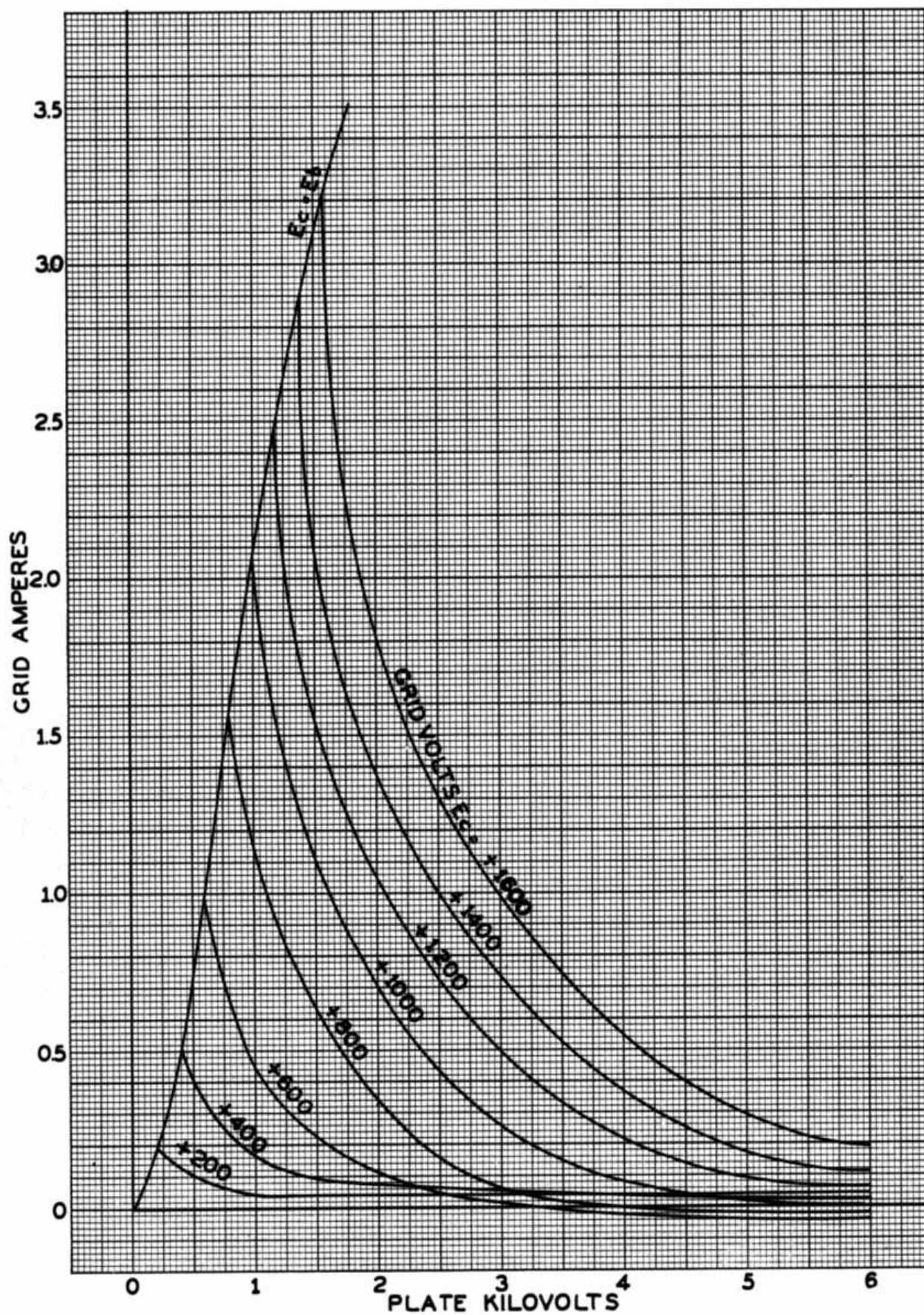
TECHNICAL DATA

Main Use	R-F Power Amplifier,
Number of Electrodes	3
Filament Voltage	21.5 volts
Current	58 amperes
Type	Tungsten
Thermionic Emission	10 amperes
Average Characteristic Values calculated at $E_b=10000$, $I_b=0.65$ ampere, $E_f=21.5$ volts	
Grid Voltage (approximate)	-50 volts
Amplification Factor	40
Mutual Conductance	6670 micromhos
Plate Resistance	6000 ohms
Approximate Direct Inter-electrode Capacitances	
Plate to Grid	25 mmf.
Grid to Filament	17 mmf.
Plate to Filament	2 mmf.
Type of Cooling	Forced Air
Mounting	Special

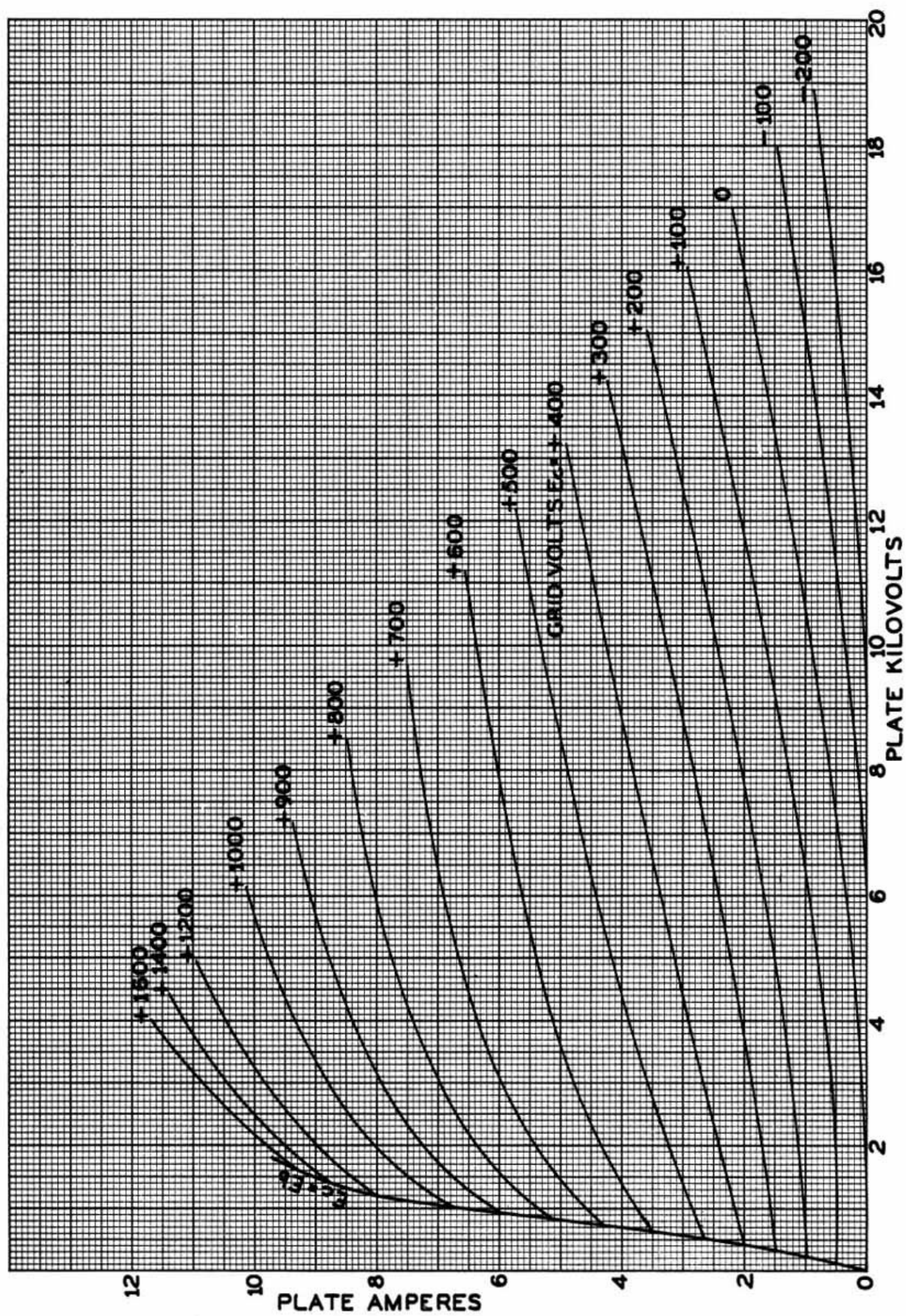
The information above and in the following pages by no means represents exact conditions of operation to be imposed for any particular situation. Since tubes are used under many widely different conditions the manufacturer will gladly furnish information regarding characteristics for design purposes.

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

AVERAGE GRID CHARACTERISTICS F-343-R Transmitting Tube



AVERAGE PLATE CHARACTERISTICS F-343-R Transmitting Tube



Maximum Ratings

F-343-R Transmitting Tube
For maximum frequency of 4.0 megacycles

CLASS C R-F POWER AMPLIFIER TELEPHONY-PLATE MODULATED

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

D-C Voltage	10000 volts
D-C Plate Current	1.5 amperes
D-C Grid Current	0.25 amperes
R-F Grid Current	30 amperes
Plate Dissipation	7500 watts

Typical Operation Data

F-343-R Transmitting Tube

CLASS C R-F POWER AMPLIFIER AND OSCILLATOR-PLATE MODULATED

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

Filament Voltage	21.5 volts
D-C Plate Voltage	9000 volts
D-C Grid Voltage	-800 volts (approx.)
Peak R-F Grid Input Voltage	1380 volts (approx.)
D-C Plate Current	0.675 amperes
D-C Grid Current	0.043 amperes
Driving Power	58 watts (approx.)
Power Output	5000 watts (approx.)

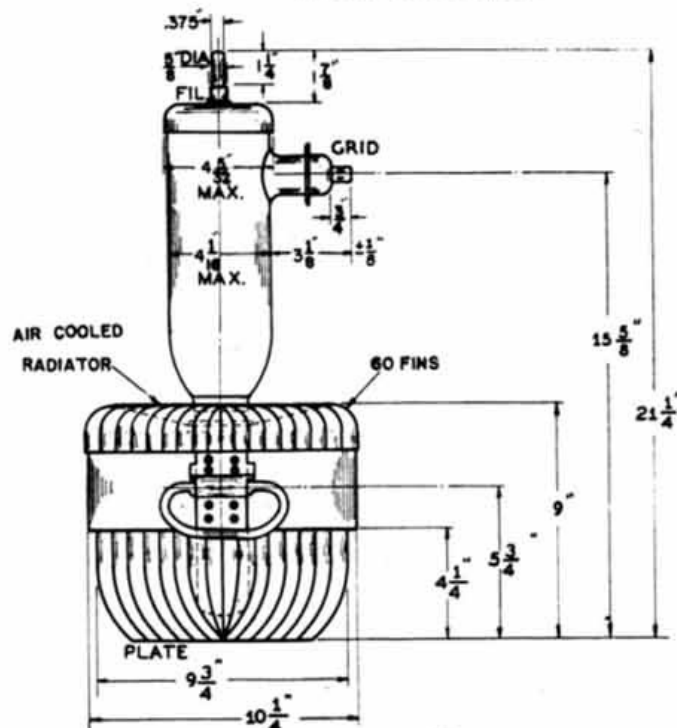
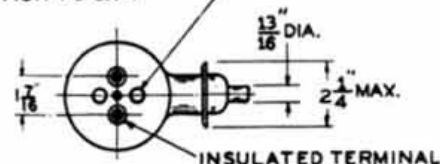
For Max. Inlet Air Temperature=25° cCent.

Net Anode Dissipation KW (1)	Minimum Recommended Air Flow Cu.ft./min.	Approx. Air Pressure Inches of Water (2)	Average Air Velocity Through Fin. Assembly ft./min.	Approximate Air Temperature Rise Degrees Cent.
5.	520	0.2	1380	22.5
7.5	1000	0.6	2660	16.

(1) This is anode dissipation exclusive of filament power dissipated through anode.

(2) This pressure is measured at the base of tube mounting. Duct work must be considered to determine pressure against which blower must deliver required amount of air.

PLAN VIEW
SHOWING POSITION OF GRID
ARM IN RELATION TO CAP.



Dimensional
Data