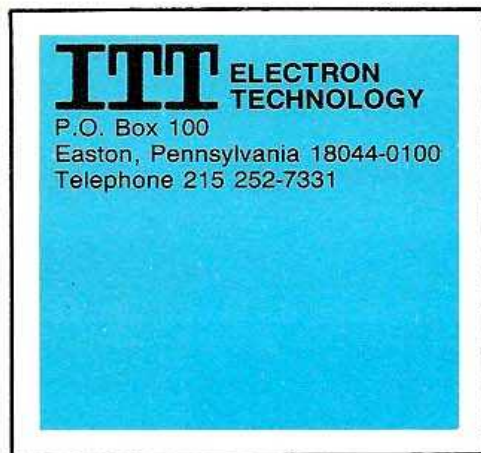




F-6399

POWER TRIODE

DESCRIPTION:

The F-6399 is a three-electrode tube designed for use as an industrial oscillator. The relatively wide spacing between the elements, and the lack of internal insulators make this type tube especially suitable for industrial applications. The anode is water-cooled with an integral water jacket, capable of dissipating 6 kilowatts. The cathode is a thoriated tungsten filament. Maximum ratings apply up to 30 megacycles. Operation up to 50 megacycles is permissible at reduced ratings.

ELECTRICAL

Filament Voltage*	11	Volts
Filament Current	29	Amperes
Amplification Factor		
$E_c = -200$ Volts; $I_b = 0.2$ Amperes	25	
Interelectrode Capacitances		
Grid-Plate	14.5	μ mf
Grid-Filament	15.0	μ mf
Plate-Filament	.6	μ mf

*Full rated voltage may be safely applied to the cold filament.

MECHANICAL

Mounting Position	Vertical, Anode up or Down
Type of Cooling	Water
Water Flow	3.5 GPM
Maximum Outgoing Water Temperature	70°C
Maximum Glass Temperature	180°C
Net Weight (Approximately)	1- $\frac{1}{4}$ Pounds

MAXIMUM RATINGS VS. OPERATING FREQUENCY

Frequency	30	50	Megacycles
Percentage of Maximum Rate Voltage and Plate Input			
Class C - Telegraphy	100	75	Percent

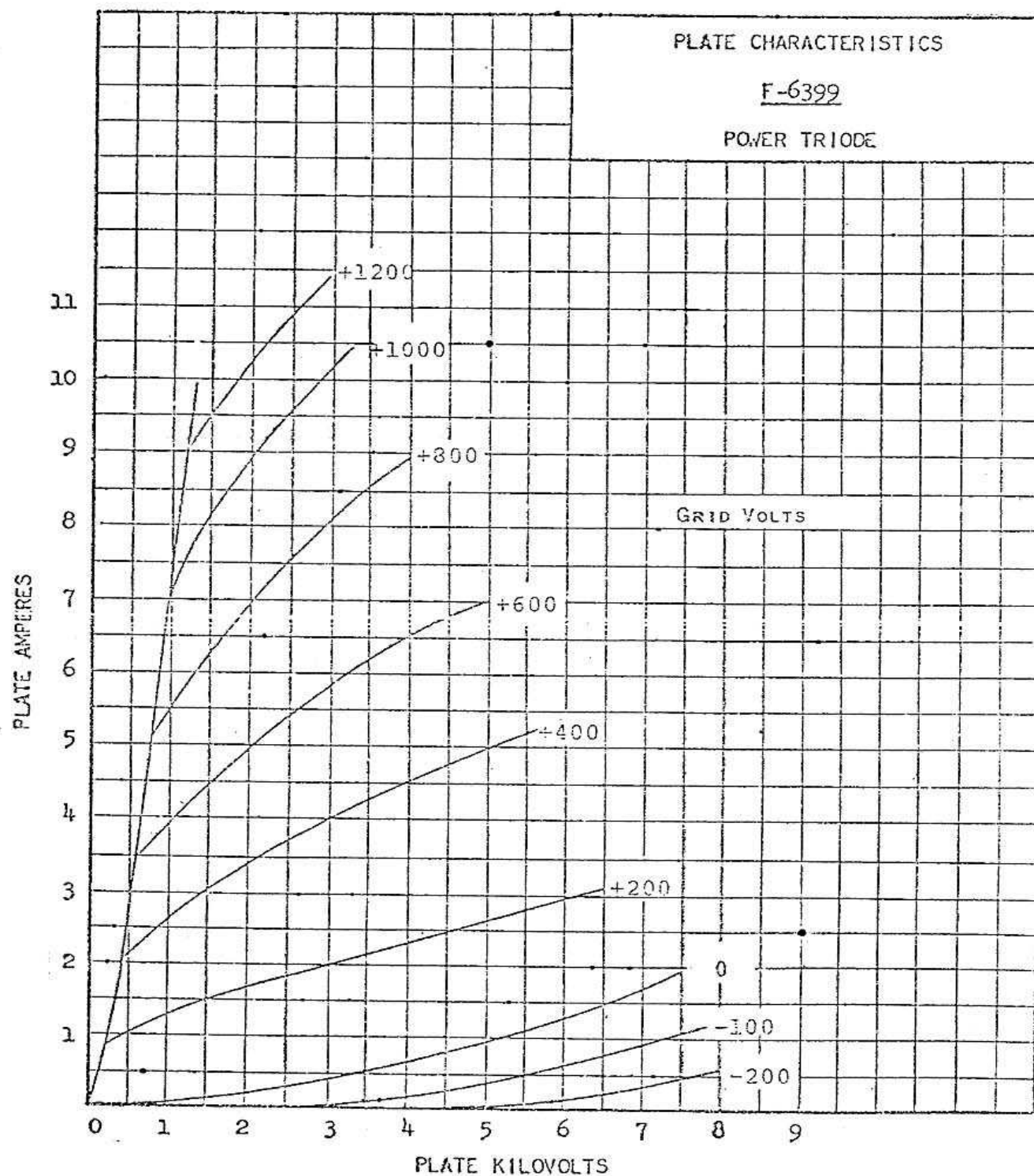
MAXIMUM RATINGS AND TYPICAL OPERATING CONDITIONSRadio-Frequency Power Amplifier and Oscillator - Class C Telegraphy
(Key-down conditions per tube without amplitude modulation*)Maximum Ratings, Absolute Values

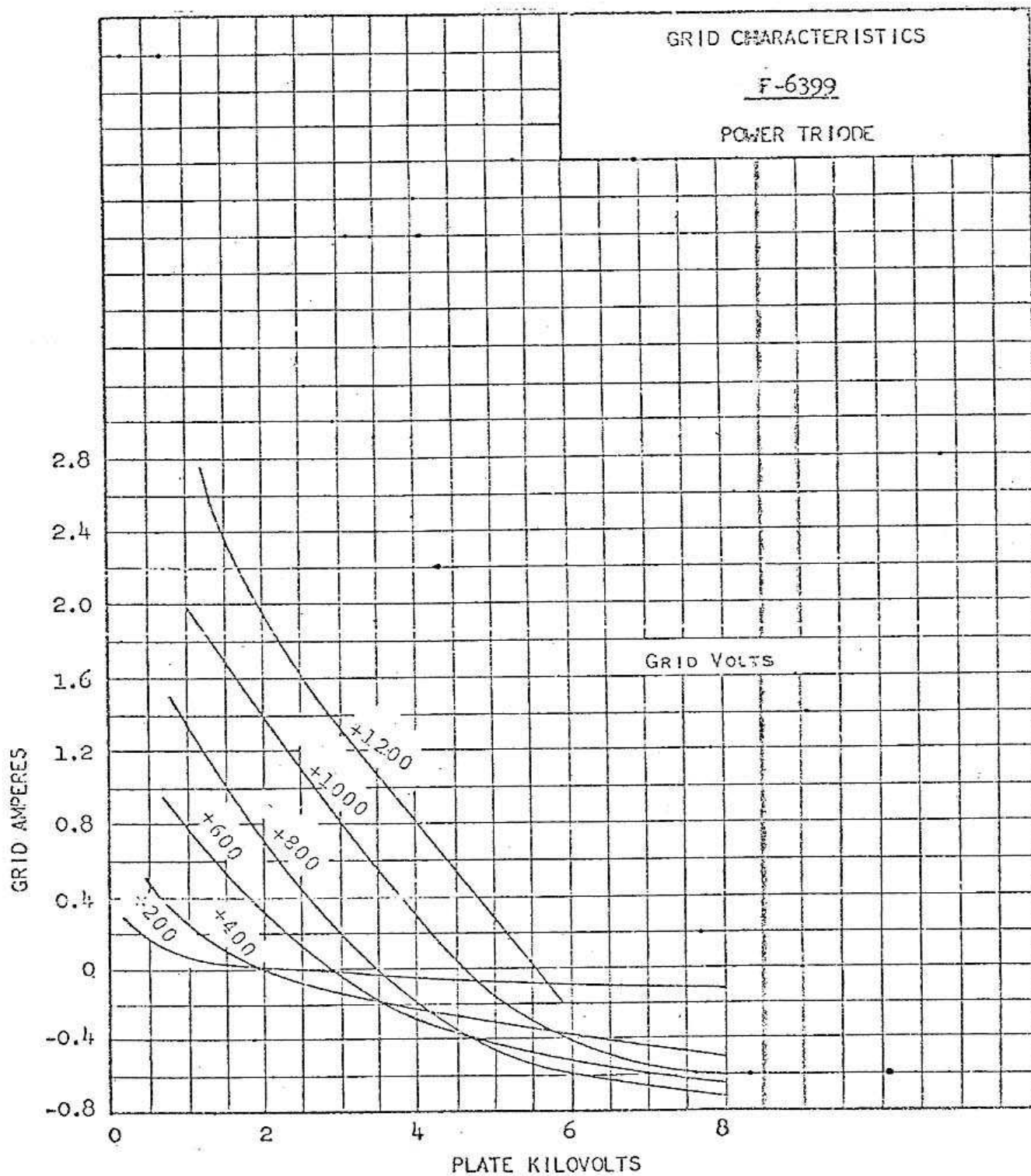
DC Plate Voltage	6,200	Volts
DC Grid Voltage	-1,500	Volts
DC Plate Current	1.5	Amperes
DC Grid Current	.200	Amperes
Plate Input	9	Kilowatts
Plate Dissipation	6	Kilowatts

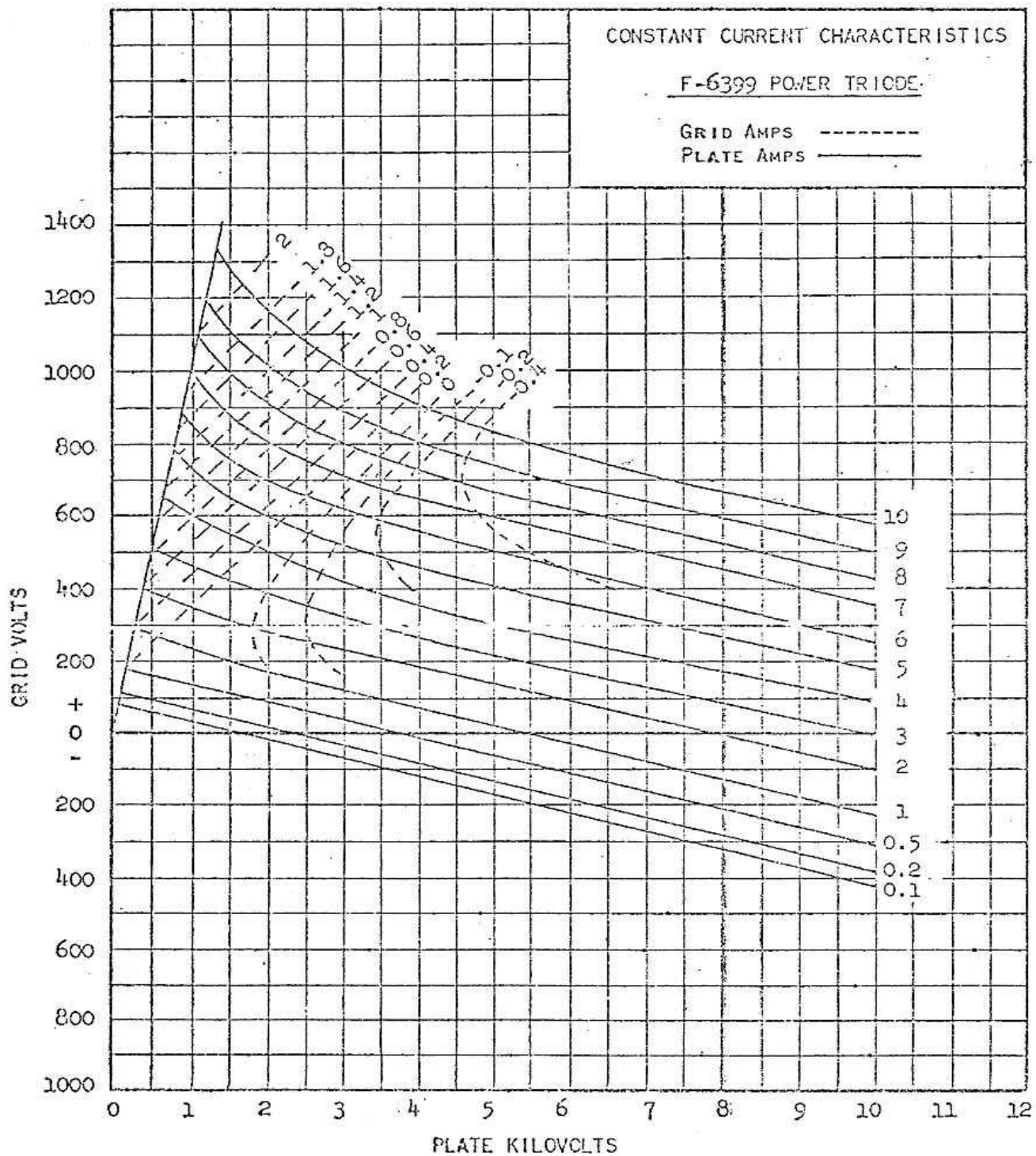
Typical Operation

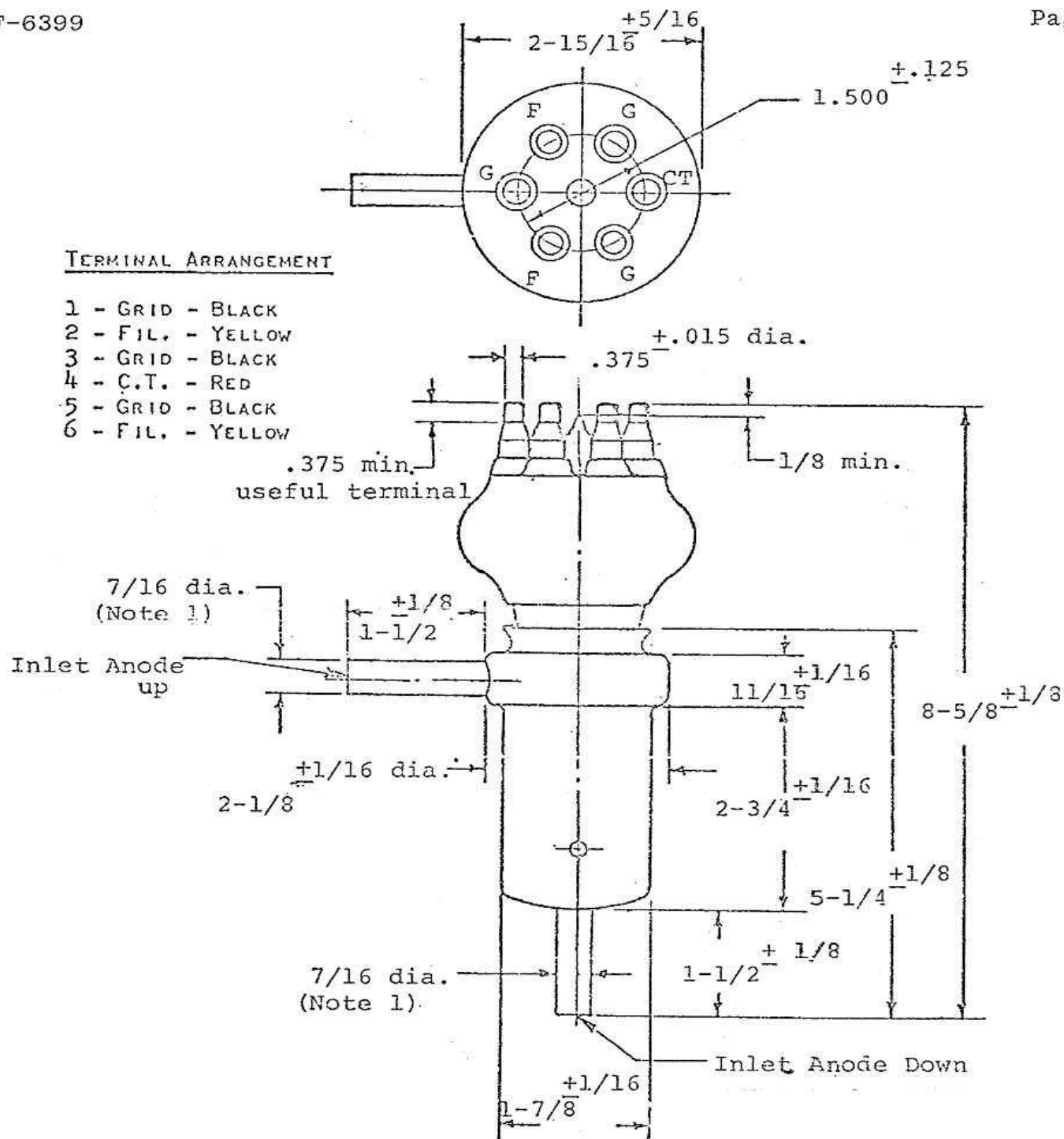
DC Plate Voltage	4,500	5,000	6,000	Volts
DC Grid Voltage	-500	-600	-800	Volts
Peak R-F Grid Voltage	1,100	1,300	1,500	Volts
DC Plate Current	1.0	1.2	1.4	Amperes
DC Grid Current (Approximately).	0.12	0.13	0.15	Amperes
Driving Power (Approximately)	120	160	210	Watts
Power Output (Approximately)	3	4	6	Kilowatts

*Modulation essentially negative may be used if the positive peak of the envelope does not exceed 115% of the carrier conditions.









NOTES: 1) Brass compression fittings are useful in making water connections.

2) 1/2" flexible lead, 6" long, available on each terminal, upon request.