

ITT ELECTRON TECHNOLOGY

P.O. Box 100
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F-6366

POWER TETRODE

DESCRIPTION:

The F-6366 is a three-electrode tube designed for use as a modulator, amplifier, and 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 air-cooled, capable of dissipating 3.0 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	11.0	Volts
Filament Current	29.0	Amperes
Amplification Factor		
$E_c = -200$ Volts, $I_b = 0.2$ Ampere	25	
Interelectrode Capacitances		
Grid-Plate	13.0	μ mf
Grid-Filament	14.5	μ mf
Plate-Filament	1.7	μ mf

MECHANICAL

Mounting Position	Vertical
Type of Cooling	Forced Air
Maximum Incoming Air Temperature	45°C
Required Air Flow on Anode	
Plate Dissipation 3.0	2.4 1.8 Kilowatts
Air Flow 190	125 75 CFM
Pressure 1.21	0.58 0.26 " of Water
Maximum Glass and Seal Temperature	150°C
Net Weight (Approximately)	5-1/4 Pounds

MAXIMUM RATINGS AND TYPICAL OPERATING CONDITIONS

Radio-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	1.3	Amperes
DC Grid Current	.150	Amperes
Plate Input	7	Kilowatts
Plate Dissipation	3	Kilowatts

ELECTRON TECHNOLOGY DIVISION **ITT**

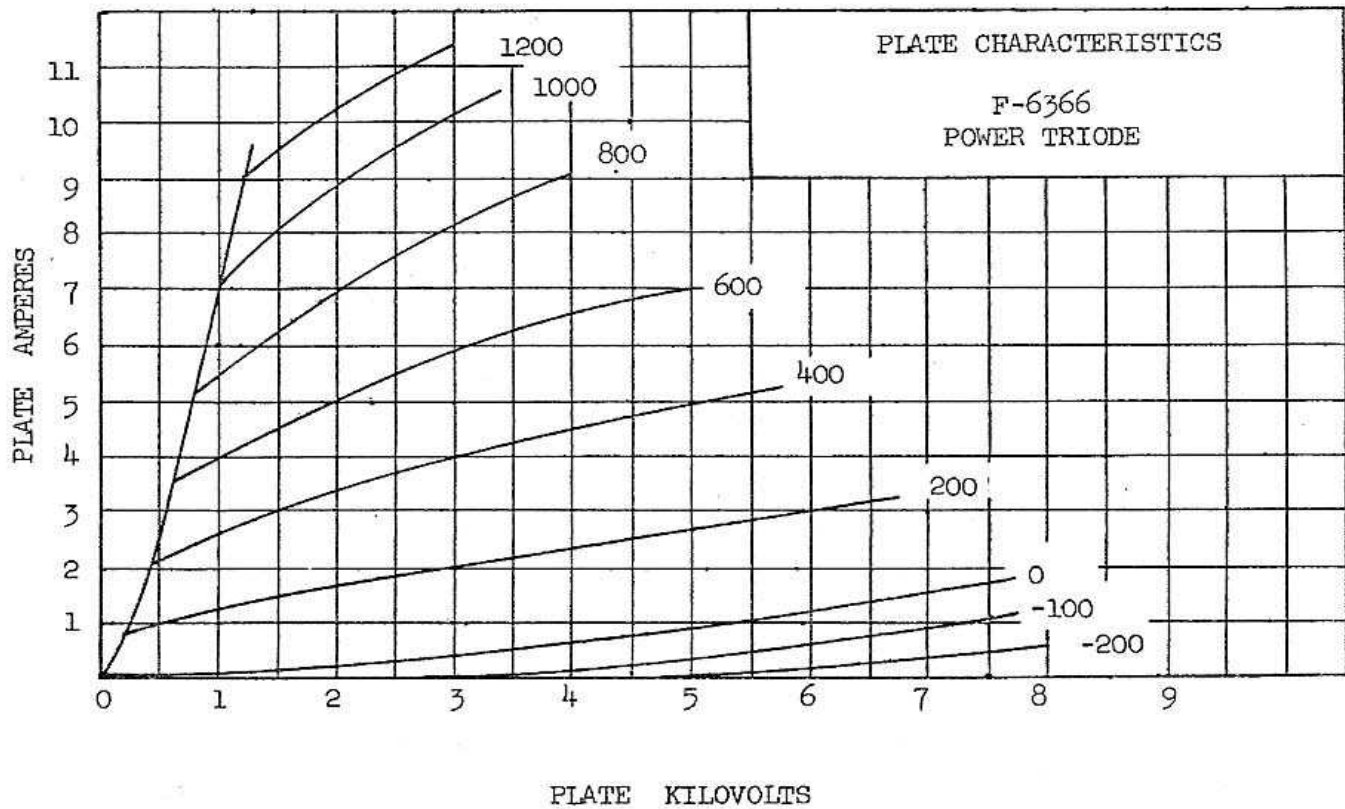
Typical Operation

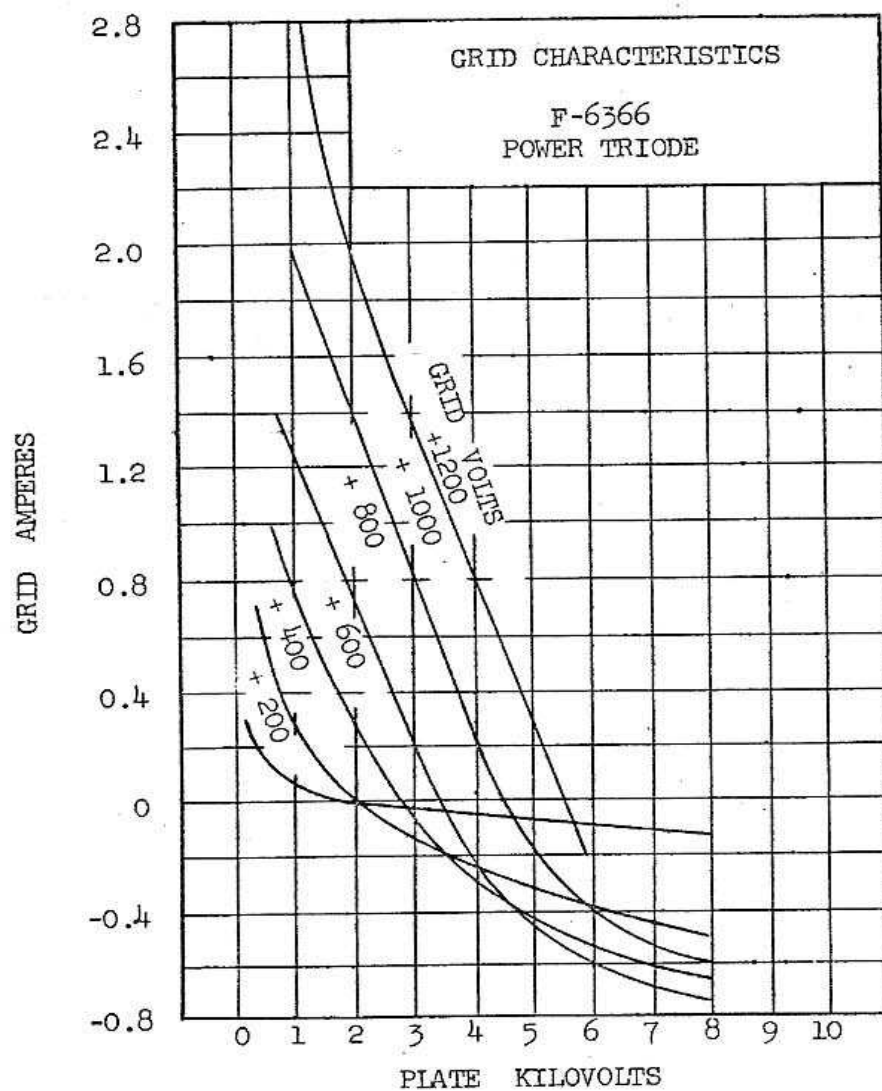
DC Plate Voltage	4,500	5,000	Volts
DC Grid Voltage	-500	-600	Volts
Peak R-F Grid Voltage	1,100	1,300	Volts
DC Plate Current	1.0	1.2	Amperes
DC Grid Current (Approximately) . . .	0.12	0.13	Amperes
Driving Power (Approximately)	120	160	Watts
Power Output (Approximately)	3	4	Kilowatts

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

MAXIMUM RATINGS VS. OPERATING FREQUENCY

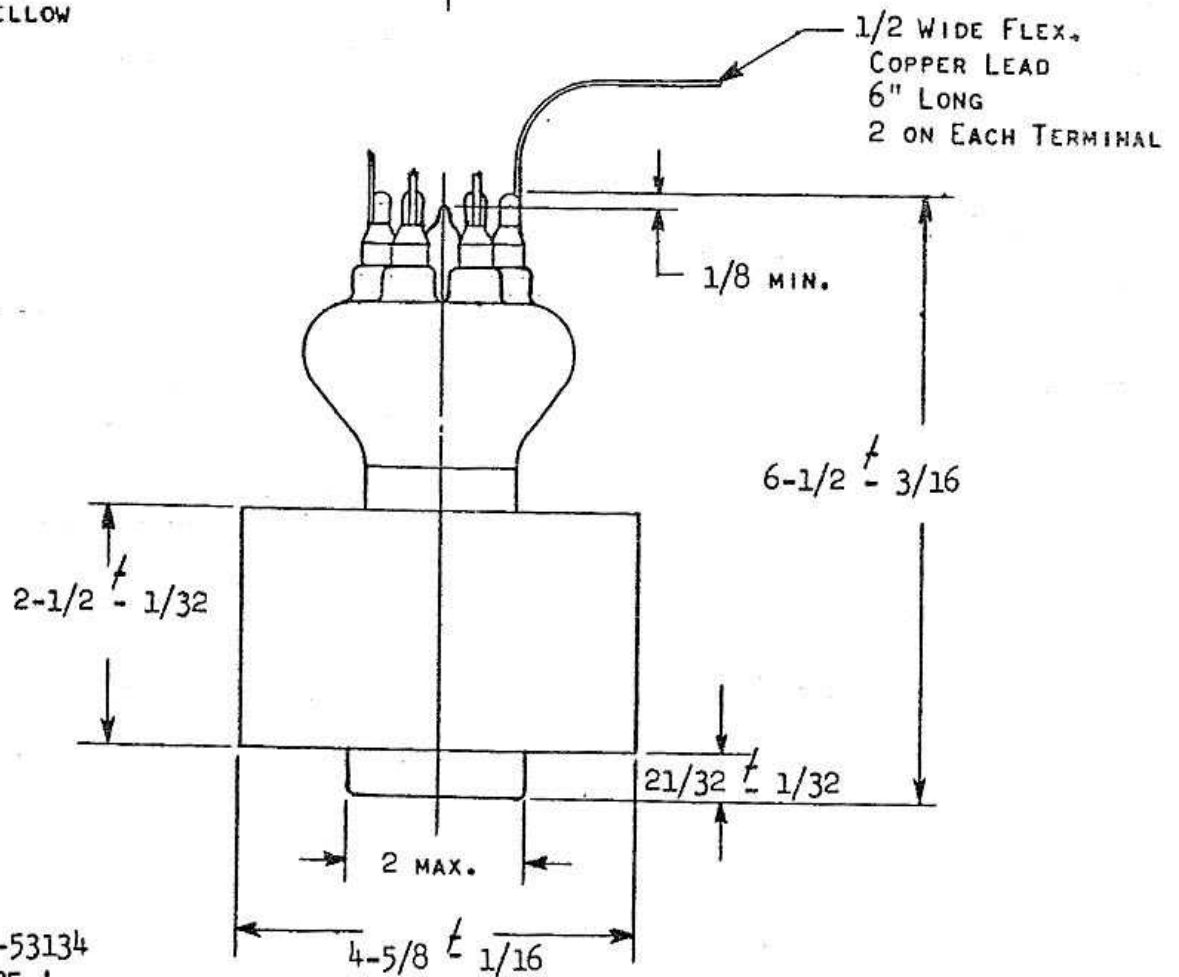
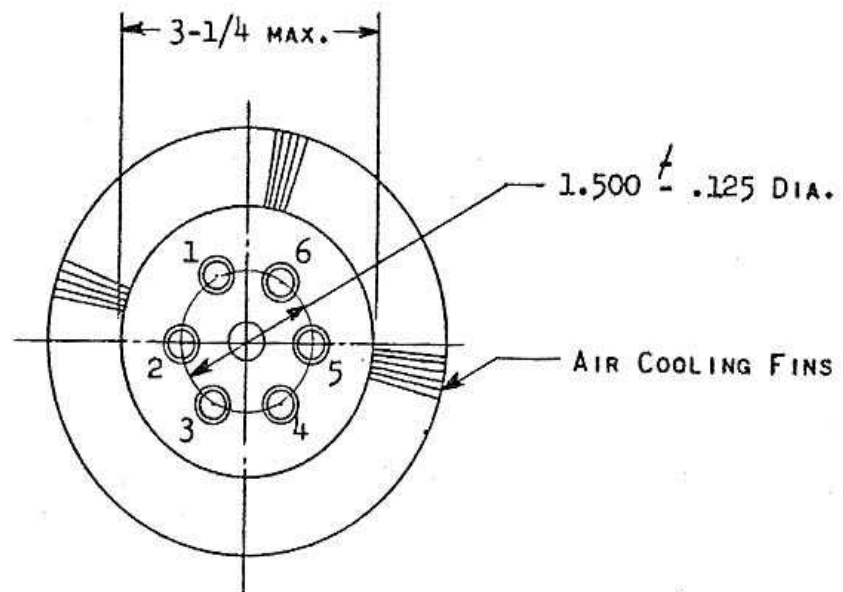
Frequency	30	50	Megacycles
Percentage of Maximum Rated Plate Voltage and Plate Input Class - C Telegraphy	100	75	Percent





TERMINAL ARRANGEMENTS

- 1 ■ GRID - BLACK
- 2 ■ FIL. - YELLOW
- 3 ■ GRID - BLACK
- 4 ■ C.T. - RED
- 5 ■ GRID - BLACK
- 6 ■ FIL. - YELLOW



ACCESSORIES:
AIR JACKET RT-53134
TYPE I

