



P.O. Box 100
Easton, Pennsylvania 18044-0100
Telephone 215 252-7331

F-6367 POWER TRIODE

DESCRIPTION:

The F-6367 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	13.0	Volts
Filament Current	36	Amperes
Amplification Factor $E_c = -200$ Volts, $I_b = 0.2$ Ampere	25	
Interelectrode Capacitances		
Grid-Plate	14.7	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 Temperature	150°C
Net Weight (Approximately)	5-1/4 Pounds

MAXIMUM RATINGS AND TYPICAL OPERATING CONDITIONS

Audio-Frequency Power Amplifier and Modulator - Class B

Maximum Ratings, Absolute Values

DC Plate Voltage	6,200	Volts
Maximum Signal DC Plate Current*	2.0	Amperes
Maximum Signal Plate Input*	6.0	Kilowatts
Plate Dissipation	3	Kilowatts

Typical Operation

(Unless otherwise specified, values are for two tubes)

DC Plate Voltage	5,000	Volts
DC Grid Voltage	-150	Volts
Peak A-F Grid-to-Grid Voltage	1,260	Volts
Zero Signal DC Plate Current	0.4	Amperes
Maximum Signal DC Plate Current	2.25	Amperes
Effective Load Resistance, Plate-to-Plate	4,000	Ohms
Maximum Signal Driving Power (Approx.)	175	Watts
Maximum Signal Power Output (Approx.)	7.2	Kilowatts

*Averaged over any audio-frequency cycle of sine-wave form.

Radio-Frequency Power Amplifier - Class B

(Carrier conditions per tube for use with a maximum modulation factor of 1.0)

Maximum Ratings, Absolute Values

DC Plate Voltage	6,200	Volts
DC Plate Current	1.5	Amperes
Plate Input	4.5	Kilowatts
Plate Dissipation	3	Kilowatts

Typical Operation

DC Plate Voltage	6,000	Volts
DC Grid Voltage	-160	Volts
Peak R-F Grid Voltage	300	Volts
DC Plate Current	0.56	Amperes
DC Grid Current (Approximately)	0.0	Amperes
Driving Power (Approximately)**	47	Watts
Power Output (Approximately)	1	Kilowatts

**At crest of audio-frequency cycle with modulation factor of 1.0.

Plate-Modulated Radio-Frequency Power Amplifier - Class C Telephony

(Carrier conditions per tube for use with a maximum modulation factor of 1.0).

Maximum Ratings, Absolute Values

DC Plate Voltage	5,000	Volts
DC Grid Voltage	-1,500	Volts
DC Plate Current	1.5	Amperes
DC Grid Current	0.2	Amperes
Plate Input	7.5	Kilowatts
Plate Dissipation	2	Kilowatts

Typical Operation

DC Plate Voltage	5,000	Volts
DC Grid Voltage	-800	Volts
Peak R-F Grid Voltage	1,370	Volts
DC Plate Current	0.74	Amperes
DC Grid Current (Approximately)	0.10	Amperes
Driving Power (Approximately)	130	Watts
Power Output (Approximately)	2.7	Kilowatts

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	2.0	Amperes
DC Grid Current	0.2	Amperes
Plate Input	12	Kilowatts
Plate Dissipation	3	Kilowatts

Typical Operation

DC Plate Voltage	6,000	Volts
DC Grid Voltage	-800	Volts
Peak R-F Grid Voltage	1,510	Volts
DC Plate Current	1.4	Amperes
DC Grid Current (Approximately)	0.16	Amperes
Driving Power (Approximately)	225	Watts
Power Output (Approximately)	6	Kilowatts

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

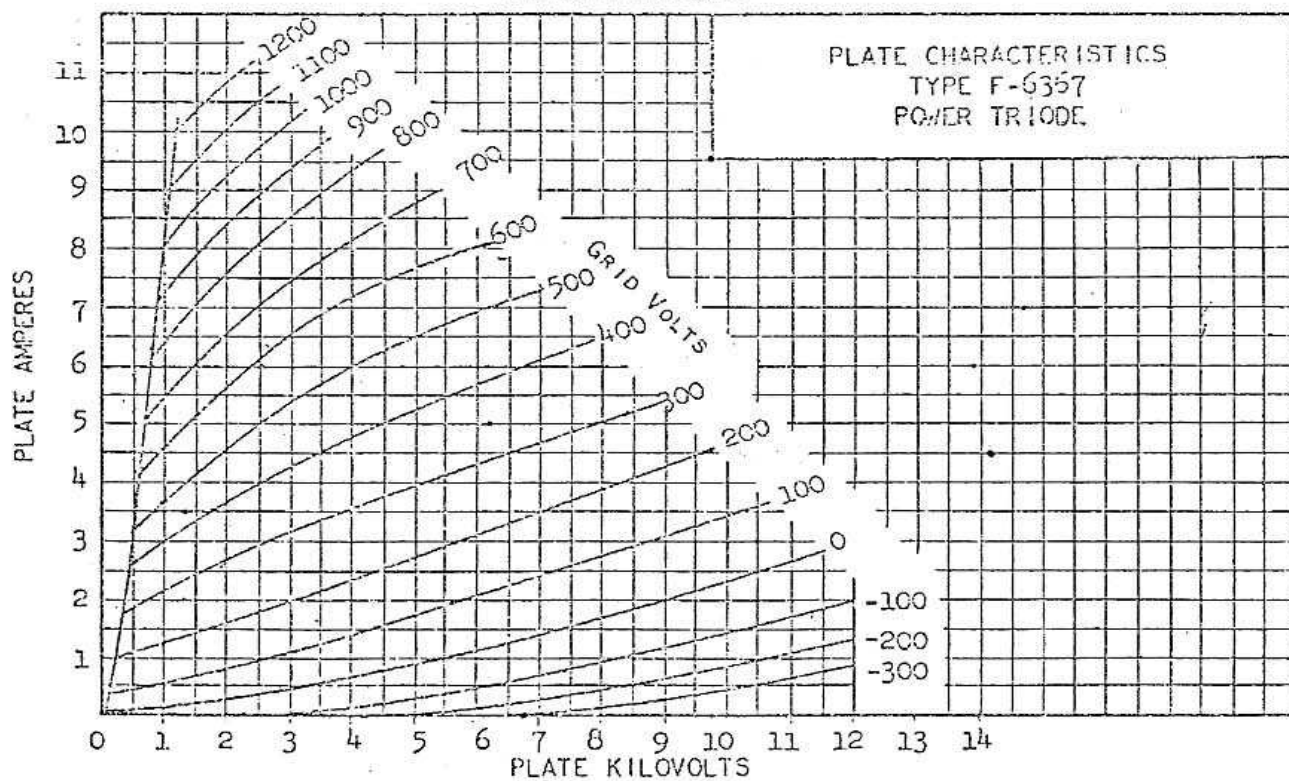
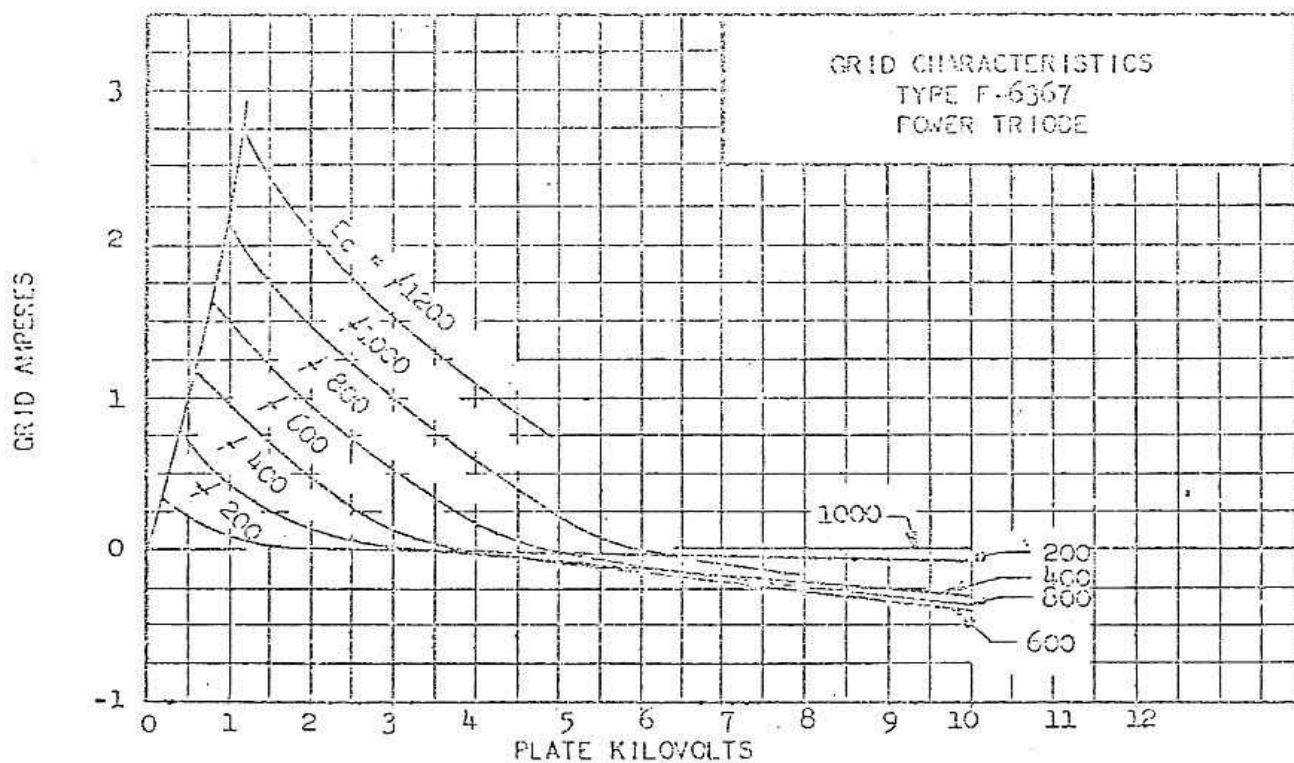
Maximum Ratings vs. Operating Frequency

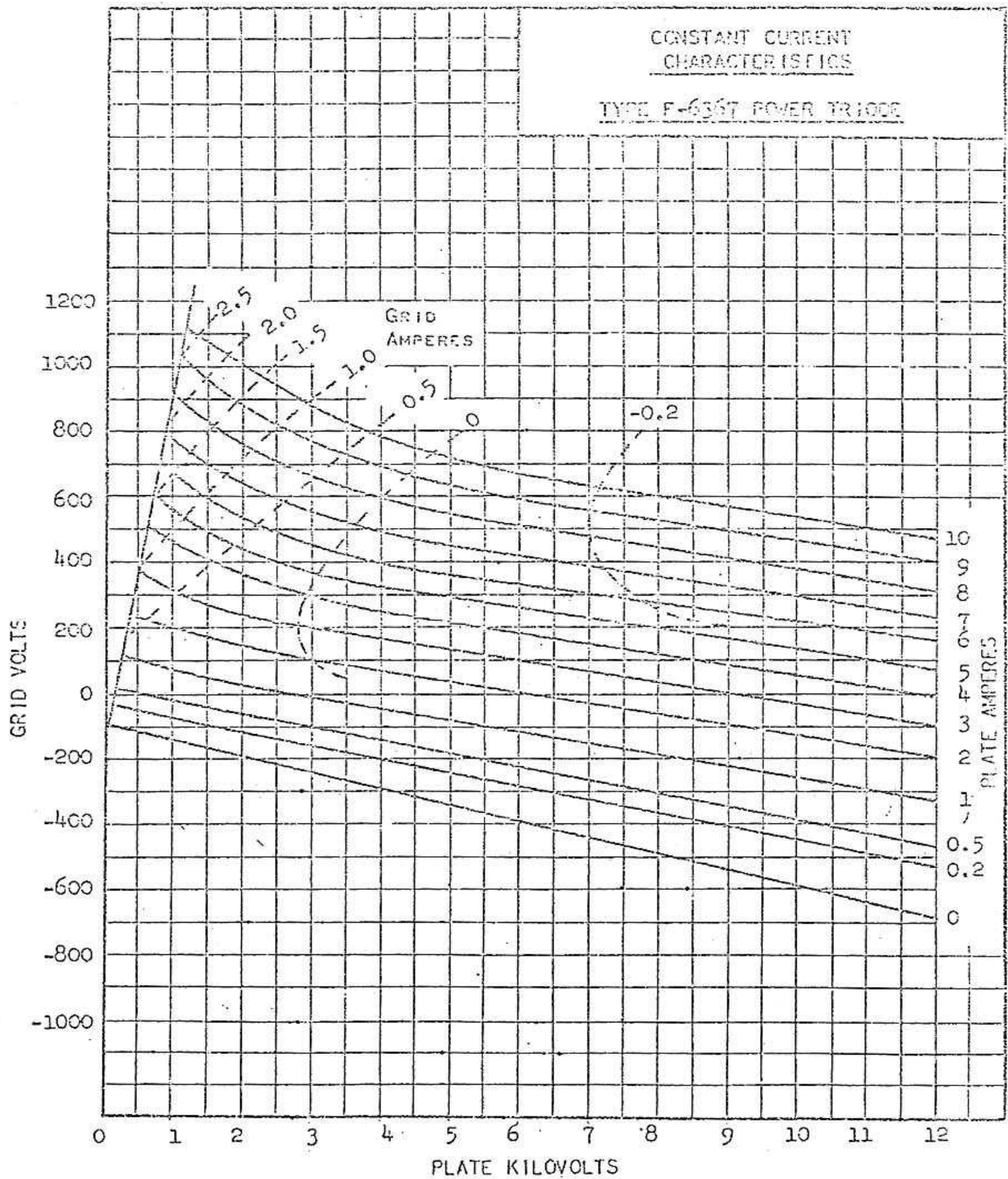
Frequency	30	50	Megacycles
Percentage of Maximum Rated Plate Voltage and Plate Input Class C - Telegraphy	100	75	Percent

Additional information for specific applications can be obtained from the:

ITT ELECTRON TECHNOLOGY DIVISION
 Applications Department
 P.O. Box 100
 Easton, Pennsylvania 18042

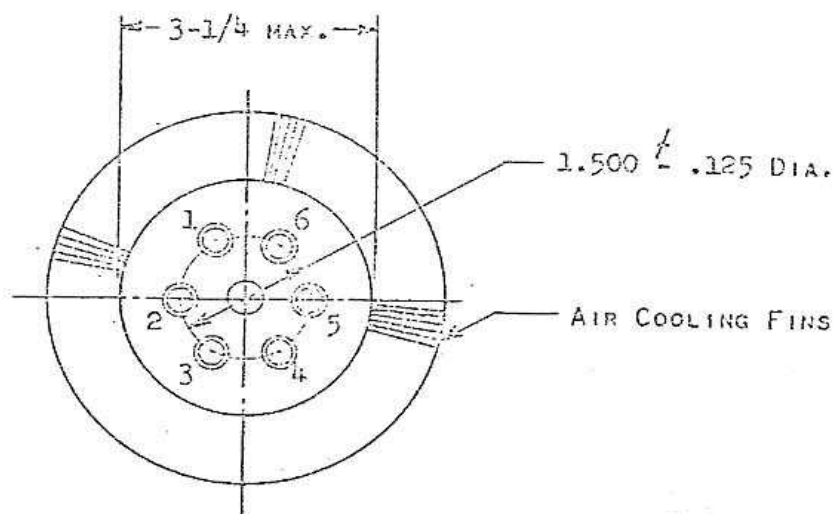
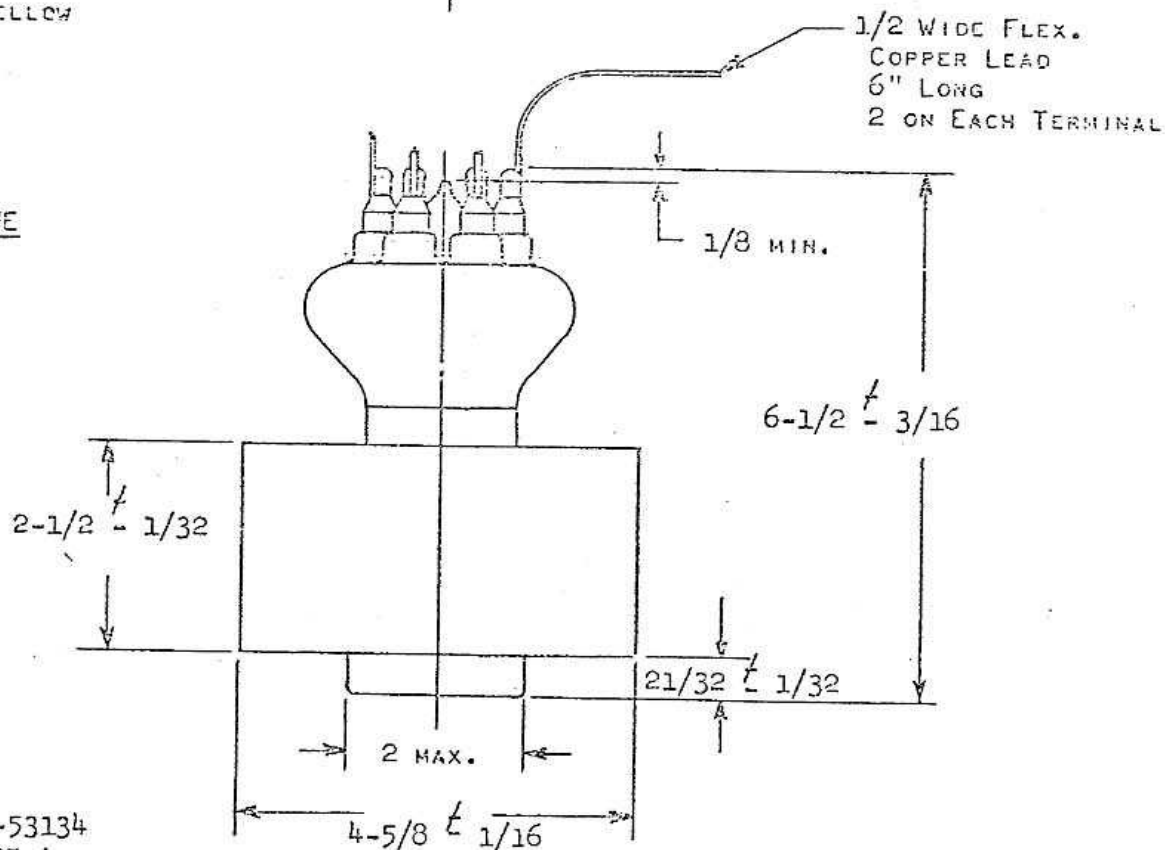
ELECTRON TECHNOLOGY DIVISION **ITT**
 BOX 100 EASTON, PA. 18044-0100





TERMINAL ARRANGEMENTS

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

F-6367 OUTLINEACCESSORIES:

AIR JACKET RT-53134
TYPE I