



## ELECTRONIC TUBE REFERENCE

# 1000T

Power - Triode (over 1000V 100W) electronic tube

CONSOLIDATED TECHNICAL DATA

**1 SECTION**  
CONSTRUCTION  
**TRIODE**

Large transmitting triode for RF power amplification, oscillation, modulation, and audio-frequency power service. Rated for 1 kW plate dissipation, operation to about 50 MHz, and multi-kilowatt RF or push-pull audio output.

## GENERAL CHARACTERISTICS

|                     |                   |                      |               |
|---------------------|-------------------|----------------------|---------------|
| BASE DESIGNATION    | —                 | BASE PINS            | 4             |
| NOMINAL HEATER      | 7.5 V / 15.5 A    | PARALLEL HEATER      | — / —         |
| HEATING             | Direct            | SERIES OPERATION     | Not specified |
| CATHODE ARRANGEMENT | Separate cathodes | SECTION CONSTRUCTION | Similar       |

## SECTION RATINGS

|                                                                                                                                          |           |
|------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| <b>SECTION 1</b> Triode                                                                                                                  |           |
| TRANSCONDUCTANCE                                                                                                                         | 0.00905 S |
| AMPLIFICATION FACTOR                                                                                                                     | 35        |
| MAXIMUM PLATE VOLTAGE                                                                                                                    | 7500 V    |
| MAXIMUM PLATE DISSIPATION                                                                                                                | 1000 W    |
| MAXIMUM GRID DISSIPATION                                                                                                                 | 80 W      |
| <i>Published RF/AF maximum ratings promoted; max DC plate current retained as parameter because schema has no MaxPlateCurrent field.</i> |           |

## 1000T — High-Mu Power Triode

The **1000T** (also designated as the **GL-1000T**) is a high-mu three-electrode vacuum tube, or *Pliotron*, designed for heavy-duty power amplification, modulation, and oscillation. Its primary applications include Class B (or Class [AB2](#)) audio-frequency power amplification and modulation, Class C radio-frequency power amplification and oscillation (such as telegraphy or FM telephony), and plate-modulated Class C

radio-frequency telephony. The tube features a thoriated-tungsten filament and a heavy-duty anode capable of dissipating up to 1000 watts under continuous wave (CW) conditions. Its maximum ratings are applicable at frequencies up to 50 megacycles (Mc).

## Mechanical Design, Base, and Physical Dimensions

The 1000T is constructed with a large glass bulb envelope and specialized metal-to-glass seals designed to withstand high operating temperatures. The tube must be mounted vertically, with the base either down or up (certain specifications restrict mounting to vertical, base down only). To protect the tube from mechanical stress, the leads connected to the plate and grid terminals must be flexible, and the entire assembly must be isolated from vibration and shock.

The physical dimensions and mechanical specifications of the tube are as follows:

- **Maximum Overall Length:** 12.625 inches
- **Seated Height:** approximately 12.3 inches
- **Maximum Diameter:** 5.125 to 5.13 inches
- **Net Weight:** approximately 1.25 pounds
- **Average Shipping Weight:** 6.25 pounds
- **Base Type:** 50-watt jumbo 4-pin base with an integrated air-conduction pipe (Base No. 5004B, RMA type 4AQ)
- **Recommended Socket:** Johnson type No. 123-211 or an equivalent high-power socket

The grid and plate connections are brought out to dedicated external terminal caps (Cap No. 4004C for the plate, and Cap No. 4005C for the grid) to ensure high voltage isolation and low interelectrode capacitance.

## Filament and Electrical Characteristics

The cathode of the 1000T is a thoriated-tungsten filament designed for high thermionic emission. Due to the high current requirements, all four socket terminals must be utilized, wiring two terminals in parallel for each of the two filament connections to minimize contact resistance and voltage drop.

The primary electrical and interelectrode characteristics of the tube are:

- **Filament Voltage:** 7.5 V (with a tolerance of  $\pm 5\%$ )
- **Filament Current:** 15.5 to 17.0 A
- **Average Amplification Factor ( $\mu$ ):** 35
- **Transconductance ( $g_m$ ):** 9050 micromhos (measured at a plate current of 750 mA, a plate voltage of 6000 V, and a grid voltage of -62 V)
- **Direct Interelectrode Capacitances (Average):**
  - Grid-to-Plate ( $C_{gp}$ ): 5.0 to 5.1 pF (uuf)
  - Grid-to-Filament ( $C_{gf}$ ): 9.3 pF (uuf)
  - Plate-to-Filament ( $C_{pf}$ ): 0.5 pF (uuf)

## Cooling Requirements and Thermal Limits

Because of the substantial power levels handled by the 1000T, forced-air cooling is mandatory for the envelope and the seals under all operating conditions.

- **Seal Cooling:** The base of the tube and the specialized grid and plate heat-dissipating connectors (such as Eimac HR-9) feature integrated air-conduction pipes. A forced-air supply of approximately 2 cubic feet of air per minute must be delivered to each of these pipes to cool the glass-to-metal seals.
- **Envelope Cooling:** The glass bulb must be cooled with a volume of air equivalent to that supplied by an 8-inch or 10-inch electric fan positioned approximately 12 inches from the tube.
- **Thermal Limits:** The maximum allowable temperature for both the grid and plate seals is 225°C. Temperature monitoring can be performed using temperature-sensitive lacquers (such as "Tempilaq").
- **Cooling Protocol:** Cooling air must be applied simultaneously with the application of plate and grid voltages and must continue until these voltages are completely removed. In high ambient temperatures or restricted airflow environments, cooling air must also be active when the filament voltage is applied, and it should be maintained for at least two minutes after all operating voltages are shut off.

## Audio-Frequency Power Amplifier and Modulator (Class B / Class AB2)

When operated as a Class B or Class [AB2](#) push-pull audio-frequency power amplifier or modulator, the 1000T is capable of delivering high power outputs. The maximum absolute ratings per tube for this service are:

- **Maximum D-C Plate Voltage:** 7500 V
- **Maximum D-C Plate Current (Signal):** 750 mA
- **Maximum Plate Dissipation:** 1000 W
- **Maximum Grid Dissipation:** 80 W

Typical operating parameters for a push-pull configuration using two tubes under sinusoidal wave conditions are detailed below:

| Parameter                           | 4000 V Operation | 5000 V Operation | 6000 V Operation |
|-------------------------------------|------------------|------------------|------------------|
| D-C Plate Voltage                   | 4000 V           | 5000 V           | 6000 V           |
| D-C Grid Voltage (approx.)          | -70 to -85 V     | -105 to -125 V   | -135 to -160 V   |
| Peak A-F Grid-to-Grid Input Voltage | 490 to 520 V     | 530 to 580 V     | 600 to 670 V     |
| Zero-Signal D-C Plate Current       | 300 to 335 mA    | 240 to 270 mA    | 200 to 220 mA    |

| Parameter                                         | 4000 V Operation      | 5000 V Operation      | 6000 V Operation        |
|---------------------------------------------------|-----------------------|-----------------------|-------------------------|
| <b>Max-Signal D-C Plate Current</b>               | 1.25 A                | 1.14 A                | 1.05 to 1.11 A          |
| <b>Max-Signal Driving Power (approx.)</b>         | 28 to 35 W            | 31 to 37 W            | 35 to 60 W              |
| <b>Effective Load Resistance (Plate-to-Plate)</b> | 6250 to 6350 $\Omega$ | 9200 to 9250 $\Omega$ | 12200 to 13300 $\Omega$ |
| <b>Max-Signal Plate Power Input</b>               | 5000 W                | 5700 W                | 6300 W                  |
| <b>Max-Signal Plate Power Output</b>              | 3000 W                | 3700 W                | 4600 W                  |

*Note: The maximum signal plate current and plate dissipation values are averaged over any sinusoidal audio-frequency cycle.*

## Radio-Frequency Power Amplifier and Oscillator (Class C Telegraphy or FM Telephony)

For Class C telegraphy or FM telephony under key-down conditions (per tube, without modulation), the maximum absolute ratings up to 50 Mc are:

- **Maximum D-C Plate Voltage:** 7500 V
- **Maximum D-C Plate Current:** 750 mA
- **Maximum D-C Grid Current:** 125 mA
- **Maximum Plate Dissipation:** 1000 W
- **Maximum Grid Dissipation:** 80 W

Typical single-tube operating points across various plate voltages are as follows:

| Parameter                                    | 3000 V | 4000 V | 5000 V | 6000 V |
|----------------------------------------------|--------|--------|--------|--------|
| <b>D-C Plate Voltage</b>                     | 3000 V | 4000 V | 5000 V | 6000 V |
| <b>D-C Grid Voltage</b>                      | -150 V | -150 V | -225 V | -350 V |
| <b>Peak R-F Grid Input Voltage (approx.)</b> | 350 V  | 365 V  | 420 V  | 610 V  |

| Parameter                  | 3000 V | 4000 V | 5000 V | 6000 V |
|----------------------------|--------|--------|--------|--------|
| D-C Plate Current          | 750 mA | 713 mA | 667 mA | 667 mA |
| D-C Grid Current (approx.) | 90 mA  | 100 mA | 87 mA  | 110 mA |
| Plate Dissipation          | 900 W  | 1000 W | 1000 W | 1000 W |
| Grid Dissipation (approx.) | 21 W   | 19 W   | 14 W   | 25 W   |
| Driving Power (approx.)    | 30 W   | 33 W   | 33 W   | 60 W   |
| Plate Power Input          | 2250 W | 2850 W | 3333 W | 4000 W |
| Plate Power Output         | 1350 W | 1850 W | 2333 W | 3000 W |

## Plate-Modulated Radio-Frequency Amplifier (Class C Telephony)

Under carrier conditions for plate-modulated Class C telephony, the maximum ratings are reduced to protect the tube during modulation peaks (which can reach up to 115% of the carrier envelope under negative modulation conditions). The maximum ratings up to 50 Mc are:

- **Maximum D-C Plate Voltage:** 6000 V
- **Maximum D-C Plate Current:** 600 mA
- **Maximum Plate Dissipation:** 665 W
- **Maximum Grid Dissipation:** 80 W

Typical single-tube operating parameters for plate-modulated service are:

| Parameter                   | 4000 V | 5000 V | 6000 V |
|-----------------------------|--------|--------|--------|
| D-C Plate Voltage           | 4000 V | 5000 V | 6000 V |
| D-C Grid Voltage            | -300 V | -400 V | -500 V |
| Peak R-F Grid Input Voltage | 540 V  | 660 V  | 775 V  |
| D-C Plate Current           | 600 mA | 600 mA | 600 mA |

| Parameter                  | 4000 V | 5000 V | 6000 V |
|----------------------------|--------|--------|--------|
| D-C Grid Current (approx.) | 80 mA  | 90 mA  | 95 mA  |
| Driving Power (approx.)    | 45 W   | 60 W   | 75 W   |
| Grid Dissipation (approx.) | 20 W   | 24 W   | 25 W   |
| Plate Power Input          | 2400 W | 3000 W | 3600 W |
| Plate Power Output         | 1735 W | 2335 W | 2935 W |

## Operating Curves and Engineering Interpretation

The performance of the 1000T is characterized by two primary sets of curves:

- Driving Power vs. Power Output Curves:** These curves illustrate the relationship between grid driving power, plate efficiency, and RF power output at plate voltages of 4000 V, 5000 V, and 6000 V. They represent combined grid and bias losses only, excluding external circuit losses. The curves demonstrate that plate efficiency increases as driving power rises, up to the point where plate dissipation ( $P_p$ ) reaches its maximum 1000-watt limit. For example, at 6000 V, a driving power of approximately 60 watts yields a power output of 3000 watts, corresponding to a plate efficiency of approximately 75%.
- Constant Current Characteristics:** These curves plot grid voltage against plate voltage for various constant values of plate current and grid current. The curves show that the 1000T maintains highly linear constant-current lines across a wide operating range. The grid current lines (ranging from 0.05 A up to 2.2 A) rise sharply at low plate voltages where the grid intercepts a larger share of the space charge, while the plate current lines (ranging from 0.25 A up to 8.0 A) remain relatively flat across the high plate voltage region, confirming the tube's high amplification factor and stable transconductance.

## Technical Summary

The **1000T** is a high-power, high-mu triode designed for demanding modulator, amplifier, and oscillator applications. Featuring a thoriated-tungsten filament requiring 7.5 V at 15.5 to 17.0 A, an amplification factor of 35, and a transconductance of 9050 micromhos, it is capable of delivering up to 3000 watts of RF output in Class C telegraphy or 4600 watts of audio output in Class B/AB2 push-pull modulator service. Safe operation at its maximum ratings up to 50 Mc requires strict adherence to forced-air cooling specifications for both the envelope and the glass-to-metal seals, ensuring that seal temperatures do not exceed the absolute limit of 225°C.

## SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

# 1950 Eimac Tubes

Published test conditions and operating points. Values on this page are preserved as reported by this source.

## 1950 EIMAC TUBES

## Section 1 · Triode

| OTHER                         |                 |                                                                    |
|-------------------------------|-----------------|--------------------------------------------------------------------|
| PARAMETER                     | PUBLISHED VALUE | CONDITION / NOTE                                                   |
| Voltage                       | <b>7.5 V</b>    | Voltage - 7.5 volts                                                |
| Current                       | <b>17 A</b>     | Current - 17.0 amperes                                             |
| Grid -Plate [1]               | <b>5</b>        | Grid -Plate 5 .1 jJ-jJ-f                                           |
| Grid -Plate [2]               | <b>1</b>        | Grid -Plate 5 .1 jJ-jJ-f                                           |
| Grid- Filament                | <b>9.3</b>      | Grid- Filament 9.3 jJ-jJ-f                                         |
| Plate- Filament               | <b>0.5</b>      | Plate- Filament 0.5 jJ-jJ-f                                        |
| Transconductance ( [1]        | <b>1</b>        | Transconductance (1 1,=7 50 ma . • Eb =6000, e,,=-62) 9050 jJ-mhos |
| Transconductance ( [2]        | <b>1</b>        | Transconductance (1 1,=7 50 ma . • Eb =6000, e,,=-62) 9050 jJ-mhos |
| Transconductance ( [3]        | <b>7</b>        | Transconductance (1 1,=7 50 ma . • Eb =6000, e,,=-62) 9050 jJ-mhos |
| Transconductance ( [4]        | <b>50</b>       | Transconductance (1 1,=7 50 ma . • Eb =6000, e,,=-62) 9050 jJ-mhos |
| Transconductance ( [5]        | <b>6000</b>     | Transconductance (1 1,=7 50 ma . • Eb =6000, e,,=-62) 9050 jJ-mhos |
| Transconductance ( [6]        | <b>-62</b>      | Transconductance (1 1,=7 50 ma . • Eb =6000, e,,=-62) 9050 jJ-mhos |
| Transconductance ( [7]        | <b>9050</b>     | Transconductance (1 1,=7 50 ma . • Eb =6000, e,,=-62) 9050 jJ-mhos |
| Frequency for Maximum Ratings | <b>50 MHz</b>   | Frequency for Maximum Ratings 50 mc                                |
| D-C Plate Vo ltage [1]        | <b>4000</b>     | D-C Plate Vo ltage 4000 5000 6000 7500 volts                       |
| D-C Plate Vo ltage [2]        | <b>5000</b>     | D-C Plate Vo ltage 4000 5000 6000 7500 volts                       |
| D-C Plate Vo ltage [3]        | <b>6000</b>     | D-C Plate Vo ltage 4000 5000 6000 7500 volts                       |
| D-C Plate Vo ltage [4]        | <b>7500</b>     | D-C Plate Vo ltage 4000 5000 6000 7500 volts                       |

| PARAMETER                                   | PUBLISHED VALUE | CONDITION / NOTE                                          |
|---------------------------------------------|-----------------|-----------------------------------------------------------|
| Plate Diss ipation, per t ube ':' • • •     | <b>1000</b>     | Plate Diss ipation, per t ube ':' • • • 1000 watts        |
| D-C Grid Voltage (approx . ) [1]            | <b>-70 V</b>    | D-C Grid Voltage (approx . ) -70 -105 -135 volts          |
| D-C Grid Voltage (approx . ) [2]            | <b>-105 V</b>   | D-C Grid Voltage (approx . ) -70 -105 -135 volts          |
| D-C Grid Voltage (approx . ) [3]            | <b>-135 V</b>   | D-C Grid Voltage (approx . ) -70 -105 -135 volts          |
| Peak A-F Grid Inpu t Voltage [1]            | <b>490 V</b>    | Peak A-F Grid Inpu t Voltage 490 530 600 volts            |
| Peak A-F Grid Inpu t Voltage [2]            | <b>530 V</b>    | Peak A-F Grid Inpu t Voltage 490 530 600 volts            |
| Peak A-F Grid Inpu t Voltage [3]            | <b>600 V</b>    | Peak A-F Grid Inpu t Voltage 490 530 600 volts            |
| Zero-Sig nal D-C Plate Curren t [1]         | <b>30</b>       | Zero-Sig nal D-C Plate Curren t - .30 0 .240 .200 amps.   |
| Zero-Sig nal D-C Plate Curren t [2]         | <b>0</b>        | Zero-Sig nal D-C Plate Curren t - .30 0 .240 .200 amps.   |
| Zero-Sig nal D-C Plate Curren t [3]         | <b>240</b>      | Zero-Sig nal D-C Plate Curren t - .30 0 .240 .200 amps.   |
| Zero-Sig nal D-C Plate Curren t [4]         | <b>200</b>      | Zero-Sig nal D-C Plate Curren t - .30 0 .240 .200 amps.   |
| Ma x.-Signal D-C Plate Cu rrent [1]         | <b>1.2</b>      | Ma x.-Signal D-C Plate Cu rrent - 1.2 5 1.1 4 1.1 1 amps. |
| Ma x.-Signal D-C Plate Cu rrent [2]         | <b>5</b>        | Ma x.-Signal D-C Plate Cu rrent - 1.2 5 1.1 4 1.1 1 amps. |
| Ma x.-Signal D-C Plate Cu rrent [3]         | <b>1.1</b>      | Ma x.-Signal D-C Plate Cu rrent - 1.2 5 1.1 4 1.1 1 amps. |
| Ma x.-Signal D-C Plate Cu rrent [4]         | <b>4</b>        | Ma x.-Signal D-C Plate Cu rrent - 1.2 5 1.1 4 1.1 1 amps. |
| Ma x.-Signal D-C Plate Cu rrent [5]         | <b>1.1</b>      | Ma x.-Signal D-C Plate Cu rrent - 1.2 5 1.1 4 1.1 1 amps. |
| Ma x.-Signal D-C Plate Cu rrent [6]         | <b>1</b>        | Ma x.-Signal D-C Plate Cu rrent - 1.2 5 1.1 4 1.1 1 amps. |
| Ma x.-Signal Driv ing Power (approx . ) [1] | <b>28 W</b>     | Ma x.-Signal Driv ing Power (approx . ) - 28 31 35 watts  |
| Ma x.-Signal Driv ing Power (approx . ) [2] | <b>31 W</b>     | Ma x.-Signal Driv ing Power (approx . ) - 28 31 35 watts  |
| Ma x.-Signal Driv ing Power (approx . ) [3] | <b>35 W</b>     | Ma x.-Signal Driv ing Power (approx . ) - 28 31 35 watts  |

| PARAMETER                             | PUBLISHED VALUE | CONDITION / NOTE                                        |
|---------------------------------------|-----------------|---------------------------------------------------------|
| Effect ive Load . Plate-to-Plate [1]  | <b>6350</b>     | Effect ive Load . Plate-to-Plate - 6350 9250 12200 ohms |
| Effect ive Load . Plate-to-Plate [2]  | <b>9250</b>     | Effect ive Load . Plate-to-Plate - 6350 9250 12200 ohms |
| Effect ive Load . Plate-to-Plate [3]  | <b>12200</b>    | Effect ive Load . Plate-to-Plate - 6350 9250 12200 ohms |
| Max .-Sig na l Plate Power Output [1] | <b>3000 W</b>   | Max .-Sig na l Plate Power Output 3000 3700 4600 watts  |
| Max .-Sig na l Plate Power Output [2] | <b>3700 W</b>   | Max .-Sig na l Plate Power Output 3000 3700 4600 watts  |
| Max .-Sig na l Plate Power Output [3] | <b>4600 W</b>   | Max .-Sig na l Plate Power Output 3000 3700 4600 watts  |
| D-C Plate Voltag e [1]                | <b>3000</b>     | D-C Plate Voltag e 3000 4000 5000 6 000 7 500 volts     |
| D-C Plate Voltag e [2]                | <b>4000</b>     | D-C Plate Voltag e 3000 4000 5000 6 000 7 500 volts     |
| D-C Plate Voltag e [3]                | <b>5000</b>     | D-C Plate Voltag e 3000 4000 5000 6 000 7 500 volts     |
| D-C Plate Voltag e [4]                | <b>6</b>        | D-C Plate Voltag e 3000 4000 5000 6 000 7 500 volts     |
| D-C Plate Voltag e [5]                | <b>0</b>        | D-C Plate Voltag e 3000 4000 5000 6 000 7 500 volts     |
| D-C Plate Voltag e [6]                | <b>7</b>        | D-C Plate Voltag e 3000 4000 5000 6 000 7 500 volts     |
| D-C Plate Voltag e [7]                | <b>500</b>      | D-C Plate Voltag e 3000 4000 5000 6 000 7 500 volts     |
| D-C Plate Cur rent [1]                | <b>750</b>      | D-C Plate Cur rent 750 7 13 667 667 750 ma o            |
| D-C Plate Cur rent [2]                | <b>7</b>        | D-C Plate Cur rent 750 7 13 667 667 750 ma o            |
| D-C Plate Cur rent [3]                | <b>13</b>       | D-C Plate Cur rent 750 7 13 667 667 750 ma o            |
| D-C Plate Cur rent [4]                | <b>667</b>      | D-C Plate Cur rent 750 7 13 667 667 750 ma o            |
| D-C Plate Cur rent [5]                | <b>667</b>      | D-C Plate Cur rent 750 7 13 667 667 750 ma o            |
| D-C Plate Cur rent [6]                | <b>750</b>      | D-C Plate Cur rent 750 7 13 667 667 750 ma o            |
| D-C Grid Cu rrent [1]                 | <b>90</b>       | D-C Grid Cu rrent 90 100 87 110 125 ma o                |
| D-C Grid Cu rrent [2]                 | <b>100</b>      | D-C Grid Cu rrent 90 100 87 110 125 ma o                |
| D-C Grid Cu rrent [3]                 | <b>87</b>       | D-C Grid Cu rrent 90 100 87 110 125 ma o                |
| D-C Grid Cu rrent [4]                 | <b>110</b>      | D-C Grid Cu rrent 90 100 87 110 125 ma o                |
| D-C Grid Cu rrent [5]                 | <b>125</b>      | D-C Grid Cu rrent 90 100 87 110 125 ma o                |
|                                       |                 |                                                         |

| PARAMETER                                        | PUBLISHED VALUE | CONDITION / NOTE                                                     |
|--------------------------------------------------|-----------------|----------------------------------------------------------------------|
| D-C Grid Vol tag e [1]                           | <b>-150</b>     | D-C Grid Vol tag e -150 -150 - 225 - 3 50 volts                      |
| D-C Grid Vol tag e [2]                           | <b>-150</b>     | D-C Grid Vol tag e -150 -150 - 225 - 3 50 volts                      |
| D-C Grid Vol tag e [3]                           | <b>225</b>      | D-C Grid Vol tag e -150 -150 - 225 - 3 50 volts                      |
| D-C Grid Vol tag e [4]                           | <b>3</b>        | D-C Grid Vol tag e -150 -150 - 225 - 3 50 volts                      |
| D-C Grid Vol tag e [5]                           | <b>50</b>       | D-C Grid Vol tag e -150 -150 - 225 - 3 50 volts                      |
| Plate Power Outpu t [1]                          | <b>1350 W</b>   | Plate Power Outpu t - 1350 1850 2333 3000 watts                      |
| Plate Power Outpu t [2]                          | <b>1850 W</b>   | Plate Power Outpu t - 1350 1850 2333 3000 watts                      |
| Plate Power Outpu t [3]                          | <b>2333 W</b>   | Plate Power Outpu t - 1350 1850 2333 3000 watts                      |
| Plate Power Outpu t [4]                          | <b>3000 W</b>   | Plate Power Outpu t - 1350 1850 2333 3000 watts                      |
| Plate Input [1]                                  | <b>2250</b>     | Plate Input 2250 2850 3333 4000 watts                                |
| Plate Input [2]                                  | <b>2850</b>     | Plate Input 2250 2850 3333 4000 watts                                |
| Plate Input [3]                                  | <b>3333</b>     | Plate Input 2250 2850 3333 4000 watts                                |
| Plate Input [4]                                  | <b>4000</b>     | Plate Input 2250 2850 3333 4000 watts                                |
| Plate Dissip a t ion [1]                         | <b>900</b>      | Plate Dissip a t ion - 900 1000 1000 1000 1000 watts                 |
| Plate Dissip a t ion [2]                         | <b>1000</b>     | Plate Dissip a t ion - 900 1000 1000 1000 1000 watts                 |
| Plate Dissip a t ion [3]                         | <b>1000</b>     | Plate Dissip a t ion - 900 1000 1000 1000 1000 watts                 |
| Plate Dissip a t ion [4]                         | <b>1000</b>     | Plate Dissip a t ion - 900 1000 1000 1000 1000 watts                 |
| Plate Dissip a t ion [5]                         | <b>1000</b>     | Plate Dissip a t ion - 900 1000 1000 1000 1000 watts                 |
| Peak R. F. Grid Inp u t Vo ltage, (approx. ) [1] | <b>350</b>      | Peak R. F. Grid Inp u t Vo ltage, (approx. ) - 350 365 420 610 volts |
| Peak R. F. Grid Inp u t Vo ltage, (approx. ) [2] | <b>365</b>      | Peak R. F. Grid Inp u t Vo ltage, (approx. ) - 350 365 420 610 volts |
| Peak R. F. Grid Inp u t Vo ltage, (approx. ) [3] | <b>420</b>      | Peak R. F. Grid Inp u t Vo ltage, (approx. ) - 350 365 420 610 volts |
| Peak R. F. Grid Inp u t Vo ltage, (approx. ) [4] | <b>610</b>      | Peak R. F. Grid Inp u t Vo ltage, (approx. ) - 350 365 420 610 volts |
| Driving Power, Iapprox. ) [1]                    | <b>30 W</b>     | Driving Power, Iapprox. ) 30 33 33 60 watts                          |

## SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

# 1950 General Electric Transmitting Types

Published test conditions and operating points. Values on this page are preserved as reported by this source.

## 1950 GENERAL ELECTRIC TRANSMITTING TYPES

## Section 1 · Triode

| OTHER                       |                 |                           |
|-----------------------------|-----------------|---------------------------|
| PARAMETER                   | PUBLISHED VALUE | CONDITION / NOTE          |
| Typical plate voltage       | 6000 V          | ClassC                    |
| Typical plate current       | 750 mA          | ClassC                    |
| Maximum operating frequency | 50 MHz          | Published datasheet value |

## SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

# 1962 Eimac

Published test conditions and operating points. Values on this page are preserved as reported by this source.

## 1962 EIMAC

## Section 1 · Triode

| CAPACITANCE                |                 |                  |
|----------------------------|-----------------|------------------|
| PARAMETER                  | PUBLISHED VALUE | CONDITION / NOTE |
| Grid-Plate Capacitance     | 5 pF            | —                |
| Grid-Filament Capacitance  | 9.3 pF          | —                |
| Plate-Filament Capacitance | 0.5 pF          | —                |

| OTHER                              |                 |                  |
|------------------------------------|-----------------|------------------|
| PARAMETER                          | PUBLISHED VALUE | CONDITION / NOTE |
| Maximum Frequency for Full Ratings | 50 MHz          | —                |
| Maximum DC Plate Current           | 750 mA          | RF/AF            |

| PARAMETER                                 | PUBLISHED VALUE | CONDITION / NOTE |
|-------------------------------------------|-----------------|------------------|
| Plate-Modulated Maximum Plate Voltage     | <b>6000 V</b>   | ClassC;Telephony |
| Plate-Modulated Maximum Plate Current     | <b>600 mA</b>   | ClassC;Telephony |
| Plate-Modulated Maximum Plate Dissipation | <b>665 W</b>    | ClassC;Telephony |
| RF Typical Plate Voltage                  | <b>6000 V</b>   | ClassC           |
| RF Typical Plate Power Output             | <b>3000 W</b>   | ClassC           |
| AF Typical Plate Voltage                  | <b>6000 V</b>   | ClassAB;TwoTubes |
| AF Typical Plate Power Output             | <b>4600 W</b>   | ClassAB;TwoTubes |

## TUBE TINKER

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