



## MECHANICAL DATA

|                             |                          |
|-----------------------------|--------------------------|
| Bulb . . . . .              | T-6½                     |
| Base . . . . .              | E9-1, Small Button 9-Pin |
| Outline . . . . .           | 6-2                      |
| Basing . . . . .            | 9DZ                      |
| Cathode . . . . .           | Coated Unipotential      |
| Mounting Position . . . . . | Any                      |

## ELECTRICAL DATA

## HEATER CHARACTERISTICS

|                                               |                |
|-----------------------------------------------|----------------|
| Heater Voltage . . . . .                      | 4.7 Volts      |
| Heater Current . . . . .                      | 600 Ma         |
| Heater Warm-up Time <sup>1</sup> . . . . .    | 11 Seconds     |
| Heater-Cathode Voltage (Design Center Values) |                |
| Heater Negative with Respect to Cathode       |                |
| Total DC and Peak . . . . .                   | 200 Volts Max. |
| Heater Positive with Respect to Cathode       |                |
| DC . . . . .                                  | 100 Volts Max. |
| Total DC and Peak . . . . .                   | 200 Volts Max. |

## DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

|                                              |                         |
|----------------------------------------------|-------------------------|
| Triode Section                               |                         |
| Grid to Plate . . . . .                      | 1.5 $\mu\text{f}$       |
| Input . . . . .                              | 2.0 $\mu\text{f}$       |
| Output . . . . .                             | 0.27 $\mu\text{f}$      |
| Pentode Section                              |                         |
| Grid No. 1 to Plate . . . . .                | 0.04 $\mu\text{f}$ Max. |
| Input . . . . .                              | 7.0 $\mu\text{f}$       |
| Output . . . . .                             | 2.3 $\mu\text{f}$       |
| Triode Grid to Pentode Plate . . . . .       | 0.005 $\mu\text{f}$     |
| Pentode Grid No. 1 to Triode Plate . . . . . | 0.006 $\mu\text{f}$     |
| Pentode Plate to Triode Plate . . . . .      | 0.045 $\mu\text{f}$     |

## RATINGS (Design Center Values)

|                                            | Triode           | Pentode          |
|--------------------------------------------|------------------|------------------|
| Plate Voltage . . . . .                    | 300              | 300 Volts Max.   |
| Grid No. 2 Supply Voltage . . . . .        |                  | 300 Volts Max.   |
| Grid No. 2 Voltage . . . . .               | See Rating Chart |                  |
| Grid No. 1 Voltage                         |                  |                  |
| Positive Bias Value . . . . .              | 0                | 0 Volts Max.     |
| Plate Dissipation . . . . .                | 2.5              | 2.0 Watts Max.   |
| Grid No. 2 Input . . . . .                 |                  | 0.5 Watt Max.    |
| Grid No. 1 Circuit Resistance <sup>2</sup> |                  |                  |
| Cathode Bias . . . . .                     | 1.0              | 1.0 Megohm Max.  |
| Fixed Bias . . . . .                       | 0.5              | 0.25 Megohm Max. |

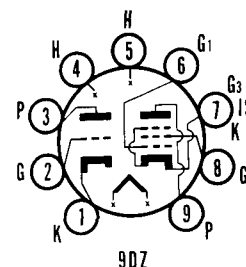
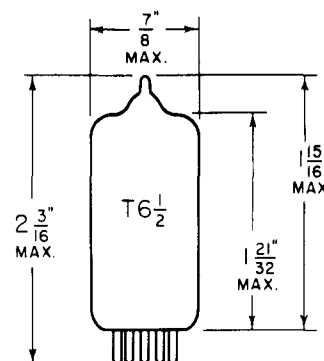
## CHARACTERISTICS

|                                                                   | Triode | Pentode               |
|-------------------------------------------------------------------|--------|-----------------------|
| Plate Supply Voltage . . . . .                                    | 200    | 200 Volts             |
| Grid No. 2 Supply Voltage . . . . .                               |        | 150 Volts             |
| Grid No. 1 Voltage . . . . .                                      | -6     | Volts                 |
| Cathode Bias Resistor . . . . .                                   |        | 180 Ohms              |
| Plate Current . . . . .                                           | 13     | 9.5 Ma                |
| Grid No. 2 Current . . . . .                                      |        | 2.8 Ma                |
| Amplification Factor . . . . .                                    | 19     |                       |
| Plate Resistance (approx.) . . . . .                              | 5750   | 300,000 Ohms          |
| Transconductance . . . . .                                        | 3300   | 6200 $\mu\text{mhos}$ |
| Grid No. 1 Voltage for $I_b = 10 \mu\text{a}$ (approx.) . . . . . | -19    | -8 Volts              |

## QUICK REFERENCE DATA

The Sylvania Type 5AV8 is a medium mu triode and sharp cutoff pentode contained in a 9-pin, miniature envelope. It is intended for service in television receivers employing a series heater arrangement.

Except for heater characteristics and basing, the Type 5AV8 is identical to the 6AN8.



SYLVANIA ELECTRIC  
PRODUCTS INC.

RADIO TUBE DIVISION  
EMPORIUM, PA.

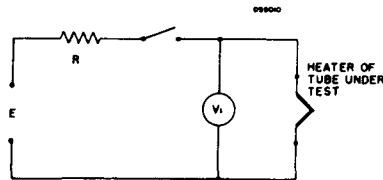
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## NOTES:

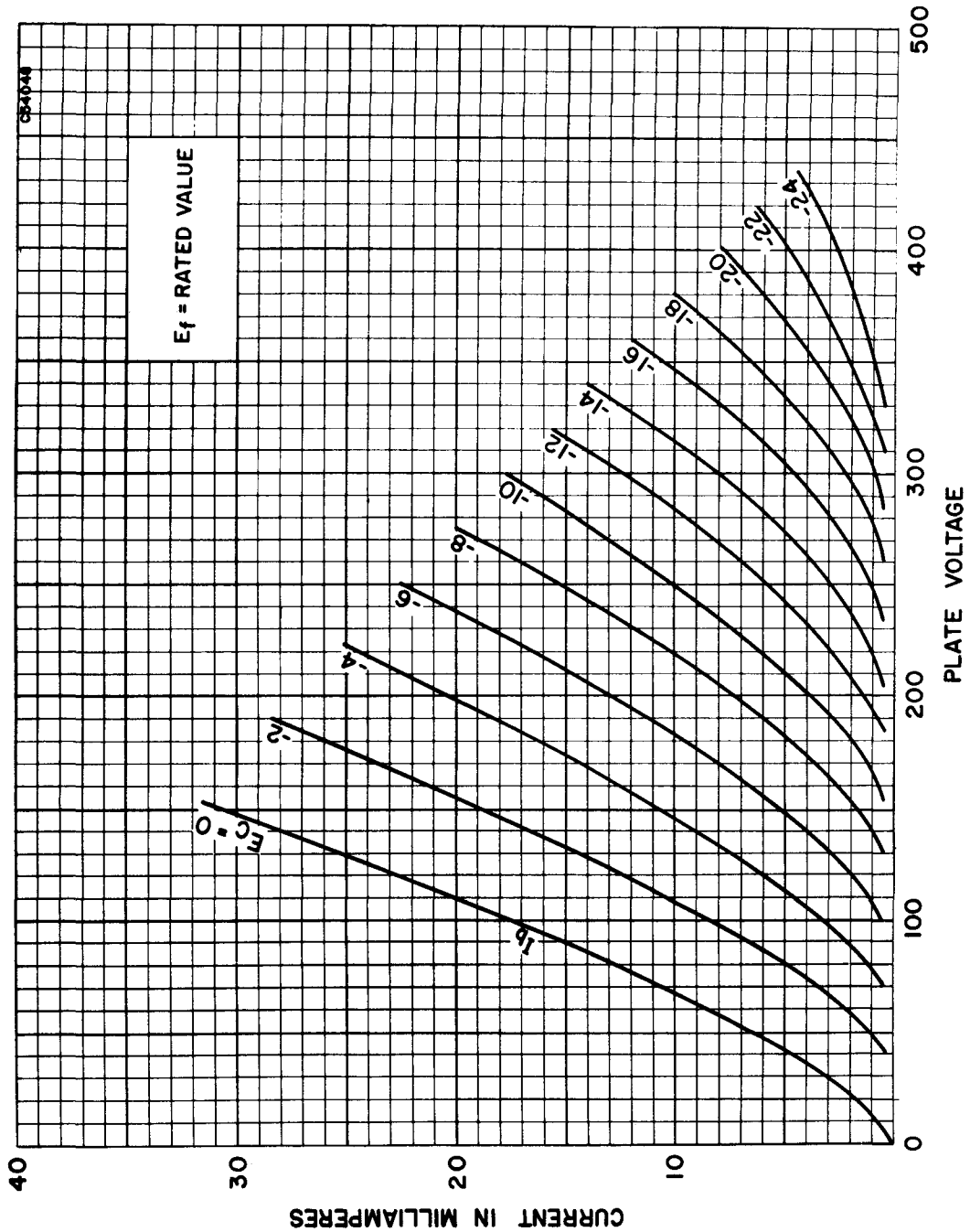
1. *Heater Warm-up Time is defined as the time required in the circuit shown below for the voltage across the heater terminals to increase from zero to the heater test voltage ( $V_1$ ). The conditions used in conjunction with the test circuit depend upon the rated heater voltage and current of the tube under test. For this type:  $E = 18.8$  Volts,  $R = 23.6$  Ohms,  $V_1 = 3.75$  Volts.*



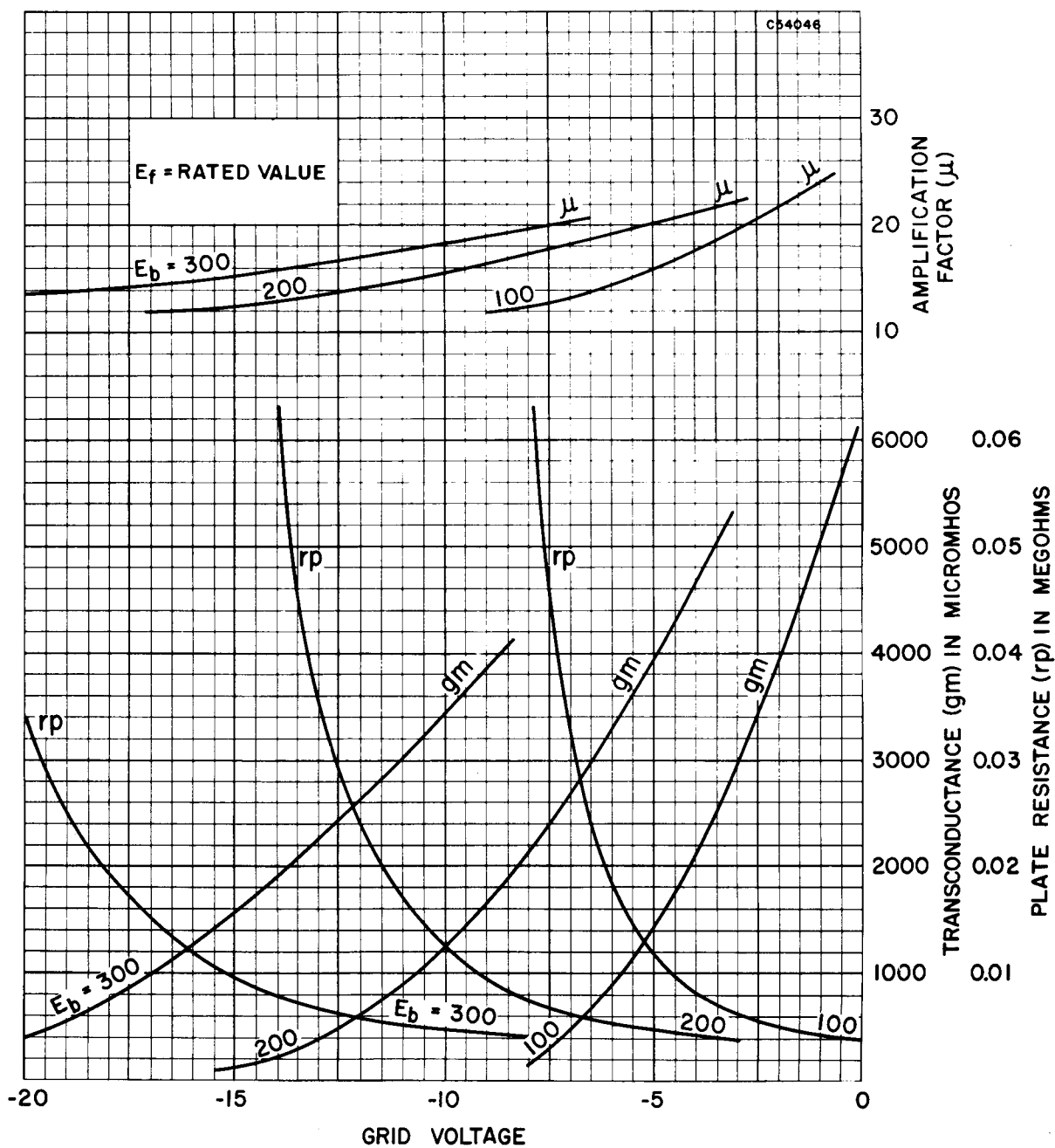
- $E$  — Applied Voltage, RMS or DC
- $R$  — Total Series Resistance
- $V_1$  — Heater Test Voltage, RMS or DC  
(80% Rated Heater Voltage)

2. *If either unit is operating at maximum rated conditions, Grid No. 1 Circuit resistances for both units should not exceed the stated values.*

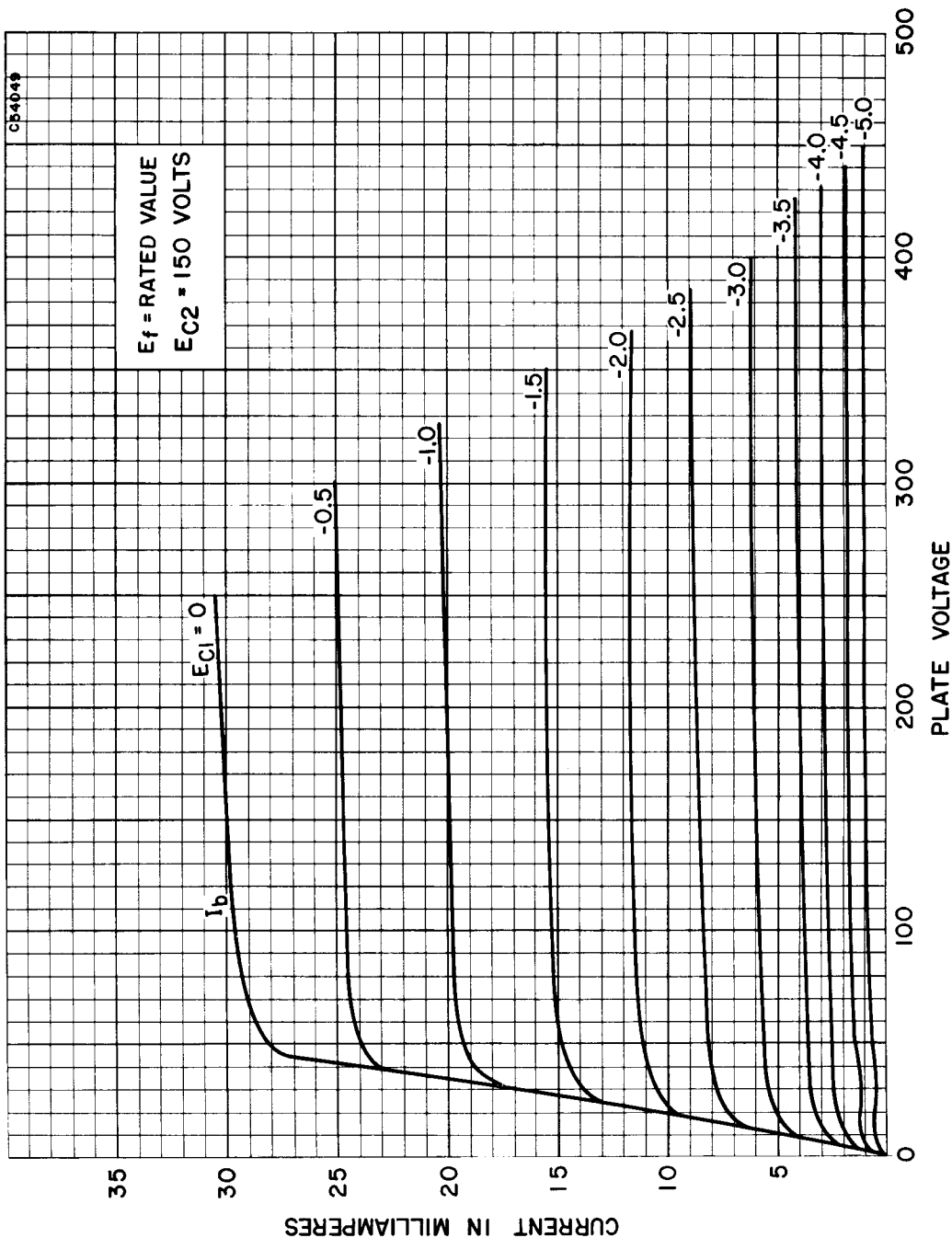
AVERAGE PLATE CHARACTERISTICS  
TRIODE SECTION



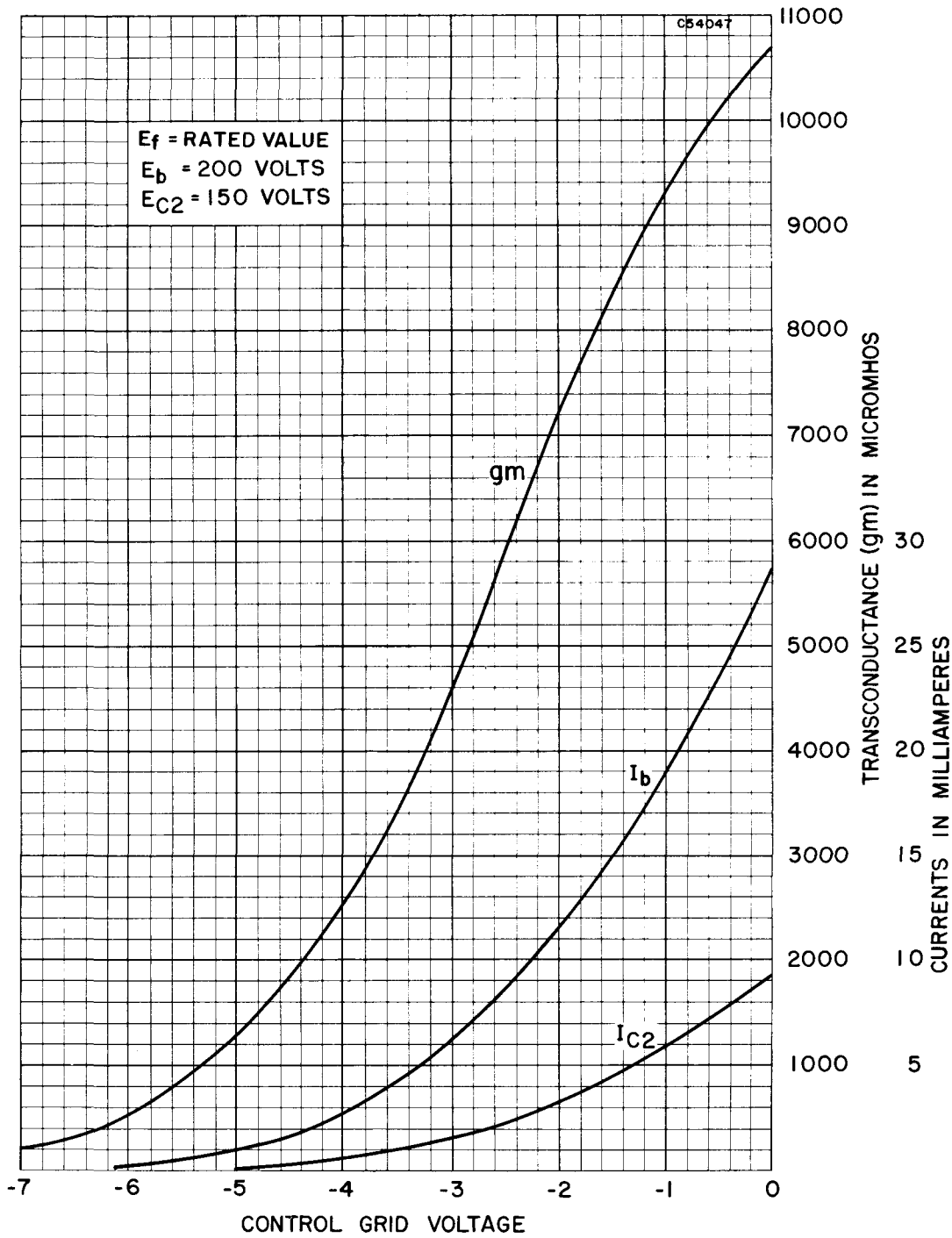
AVERAGE TRANSFER CHARACTERISTICS  
TRIODE SECTION



AVERAGE PLATE CHARACTERISTICS  
PENTODE SECTION



AVERAGE TRANSFER CHARACTERISTICS  
PENTODE SECTION



RATING CURVE

