

**MECHANICAL DATA**

|                             |                        |
|-----------------------------|------------------------|
| Bulb . . . . .              | T-5½                   |
| Base . . . . .              | Miniature Button 7-Pin |
| Outline . . . . .           | 5-2                    |
| Basing . . . . .            | 7DC                    |
| Cathode . . . . .           | Coated Filament        |
| Mounting Position . . . . . | Any                    |

**ELECTRICAL DATA**

**FILAMENT CHARACTERISTICS**

|                               |           |
|-------------------------------|-----------|
| Filament Voltage DC . . . . . | 1.4 Volts |
| Filament Current . . . . .    | 50 Ma     |

**DIRECT INTERELECTRODE CAPACITANCES**

|  | Shielded <sup>1</sup> | Unshielded |      |
|--|-----------------------|------------|------|
| RF Input:  |                       |            |      |
| g4 to (f+g1+g2+g3+g4+g5+p)                                   | 7.5                   | 7.5 μμf    |      |
| Grid No. 4 to Plate . . . . .                                | 0.36                  | 0.46 μμf   | Max. |
| Mixer Output:  |                       |            |      |
| p to (f+g1+g2+g3+g4+g5) . . . . .                            | 12.0                  | 7.0 μμf    |      |
| Oscillator Input:  |                       |            |      |
| g1 to (f+g3+g4+g5+p) . . . . .                               | 2.2                   | 2.2 μμf    |      |
| Oscillator Output:   |                       |            |      |
| g2 to (f+g3+g4+g5+p) . . . . .                               | 2.6                   | 2.6 μμf    |      |
| Coupling:  |                       |            |      |
| Grid No. 1 to Grid No. 4<br>(Osc. Inp. to RF Inp.) . . . . . | 0.19                  | 0.19 μμf   |      |
| Grid No. 2 to Grid No. 4<br>(Osc. Out. to RF Inp.) . . . . . | 0.24                  | 0.24 μμf   |      |
| Grid No. 1 to Plate<br>(Osc. Inp. to Mix. Out.) . . . . .    | 0.10                  | 0.15 μμf   | Max. |

**RATINGS (Design Center Values)**

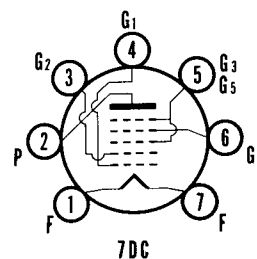
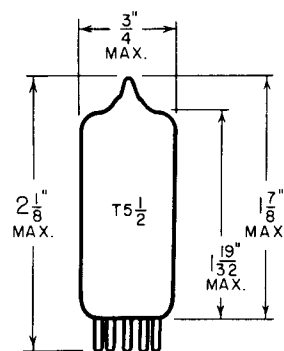
|  |            |      |
|--|------------|------|
| Plate Voltage . . . . .                            | 110 Volts  | Max. |
| Grid No. 2 Voltage (Osc. Plate) . . . . .          | 110 Volts  | Max. |
| Grid No. 3 and Grid No. 5 Supply Voltage . . . . . | 110 Volts  | Max. |
| Grid No. 3 and Grid No. 5 Voltage . . . . .        | 65 Volts   | Max. |
| Total Cathode Current . . . . .                    | 4.0 Ma     | Max. |
| Grid No. 1 Circuit Resistance . . . . .            | 1.0 Megohm | Max. |

**CHARACTERISTICS AND TYPICAL OPERATION**

|  |             |
|--|-------------|
| Plate Voltage . . . . .                                      | 90 Volts    |
| Grid No. 2 Voltage (Osc. Plate) . . . . .                    | 90 Volts    |
| Grid No. 3 and Grid No. 5 Voltage <sup>2</sup> . . . . .     | 45 Volts    |
| Grid No. 4 Voltage (Mixer Grid) . . . . .                    | 0 Volts     |
| Plate Current . . . . .                                      | 0.5 Ma      |
| Grid No. 2 Current (Osc. Plate) . . . . .                    | 1.2 Ma      |
| Grid No. 3 and Grid No. 5 Current . . . . .                  | 0.6 Ma      |
| Grid No. 1 Resistor (Osc. Grid) . . . . .                    | 0.2 Megohm  |
| Grid No. 1 Current (Osc. Grid) . . . . .                     | 0.035 Ma    |
| Conversion Transconductance . . . . .                        | 300 μmhos   |
| Plate Resistance (approx.) . . . . .                         | 0.65 Megohm |
| Cathode Current . . . . .                                    | 2.35 Ma     |
| Ec <sub>4</sub> Volts for Gc = 10 μmhos (approx.) . . . . .  | -3.5 Volts  |
| Ec <sub>4</sub> Volts for Gc = 100 μmhos (approx.) . . . . . | -1.3 Volts  |

**QUICK REFERENCE DATA**

The Sylvania Type 1L6 is a miniature type pentagrid converter designed for use in low drain battery operated receivers.



**SYLVANIA ELECTRIC PRODUCTS INC.**

**RADIO TUBE DIVISION  
EMPORIUM, PA.**

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CHARACTERISTICS AND TYPICAL OPERATION (Cont'd.)

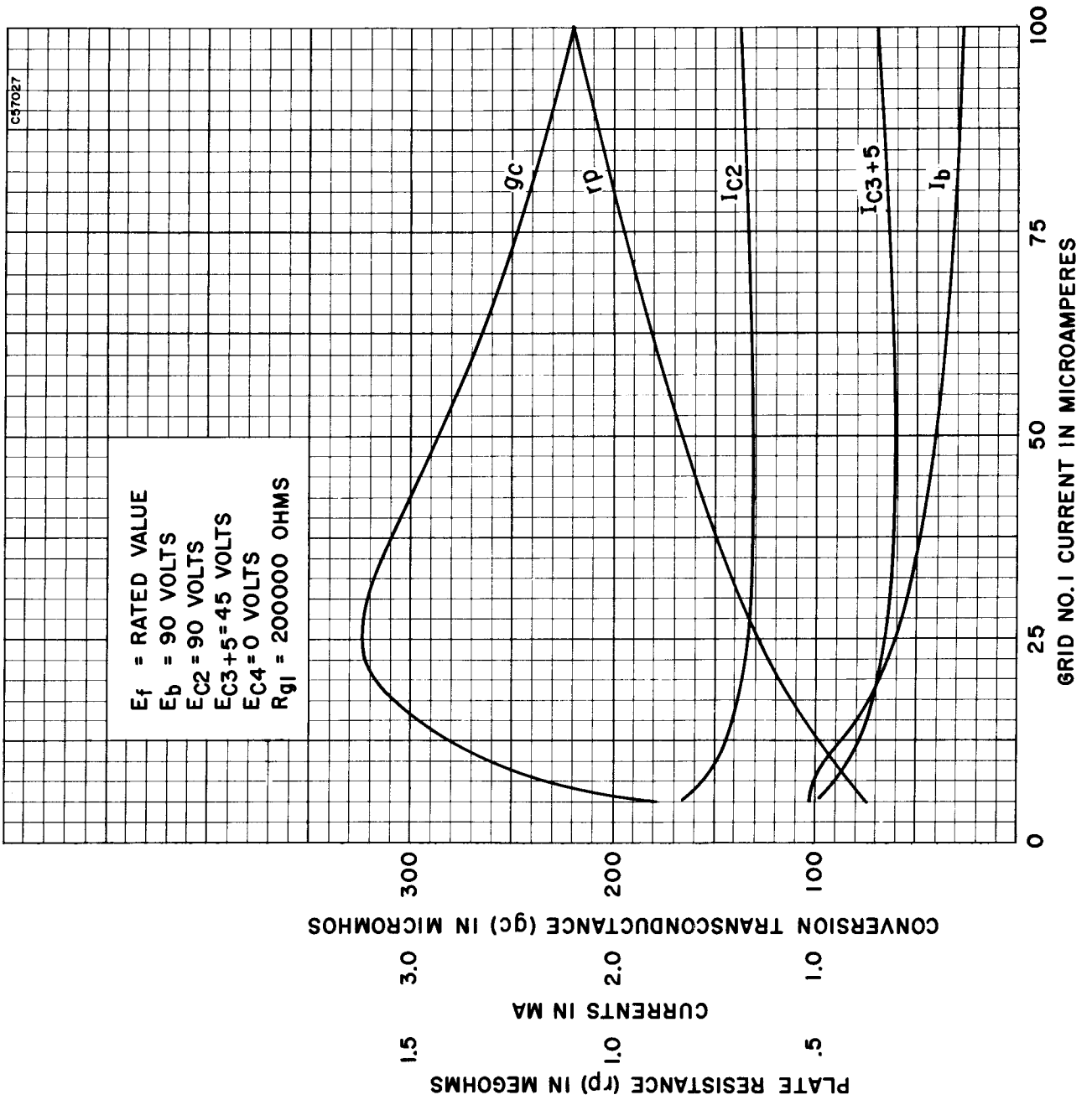
Oscillator Section Characteristics (Non-Oscillating)

|   |                |
|---|----------------|
| Grid No. 2 Voltage (Osc. Plate) . . . . .   | 90 Volts       |
| Plate Voltage . . . . .                     | 90 Volts       |
| Grid No. 3 and Grid No. 5 Voltage . . . . . | 45 Volts       |
| Grid No. 4 Voltage (Mixer Grid) . . . . .   | 0 Volts        |
| Grid No. 1 Voltage (Osc. Grid) . . . . .    | 0 Volts        |
| Transconductance (Osc. Section) . . . . .   | 550 $\mu$ mhos |

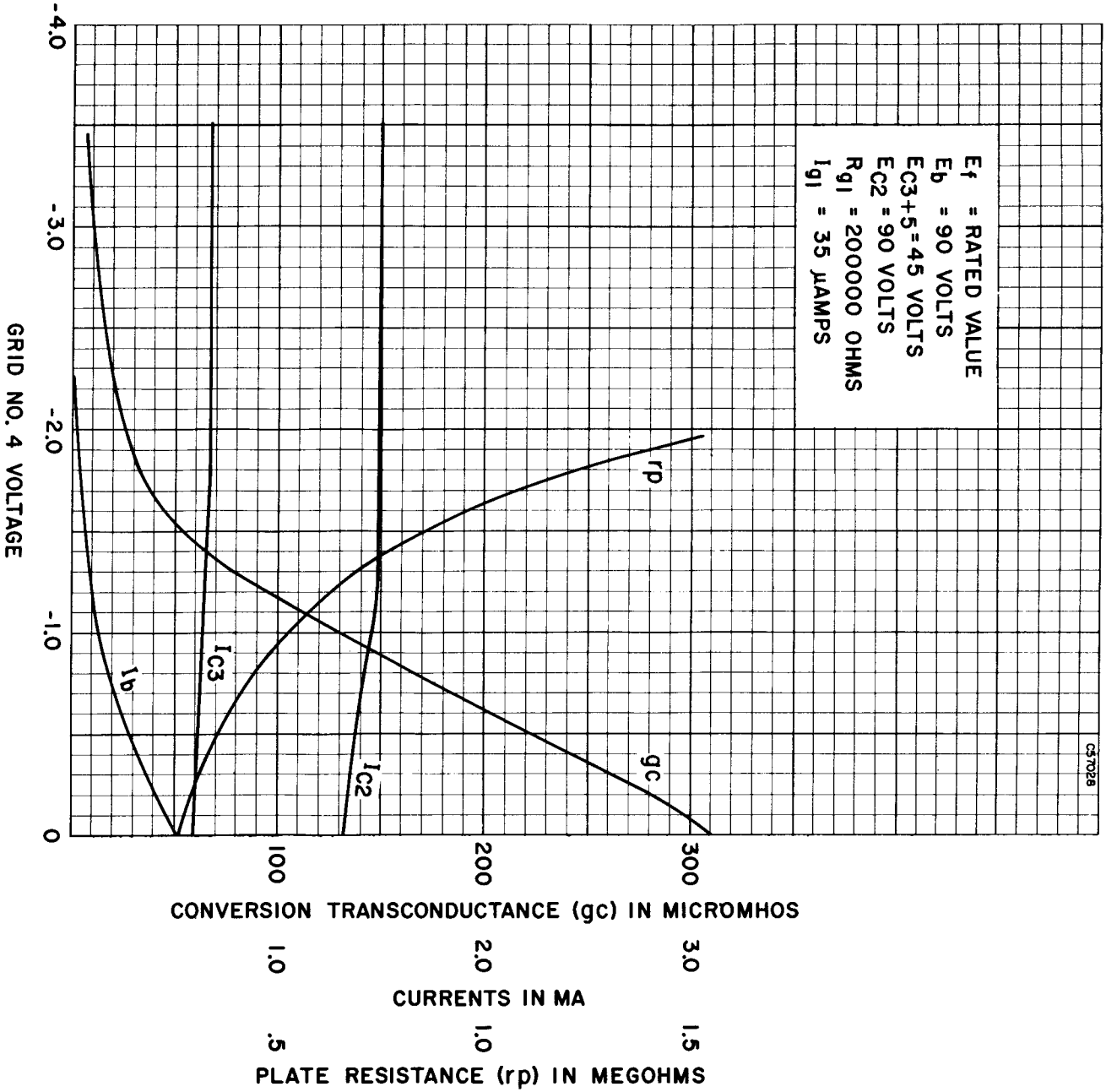
NOTES:

1. *External shield No. 316 connected to Pin No. 1.*
2. *Obtained preferably by using a properly by-passed dropping resistor of from 45,000 to 75,000 ohms.*

AVERAGE CHARACTERISTICS



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657028