

## MECHANICAL DATA

|                             |                               |
|-----------------------------|-------------------------------|
| Bulb . . . . .              | T-5 1/2                       |
| Base . . . . .              | E7-1, Miniature Button, 7-Pin |
| Outline . . . . .           | 5-2                           |
| Basing . . . . .            | 7BD                           |
| Cathode . . . . .           | Coated Unipotential           |
| Mounting Position . . . . . | Any                           |

## ELECTRICAL DATA

### HEATER CHARACTERISTICS

|                          |           |
|--------------------------|-----------|
| Heater Voltage . . . . . | 6.3 Volts |
| Heater Current . . . . . | 300 Ma    |

### DIRECT INTERELECTRODE CAPACITANCES

|                                                           | Shielded <sup>1</sup> | Unshielded               |
|-----------------------------------------------------------|-----------------------|--------------------------|
| <b>Pentode Connection</b>                                 |                       |                          |
| Grid to Plate ( $g_1$ to p) . . . . .                     | 0.020                 | 0.030 $\mu\text{f}$ Max. |
| Input: ( $g_1$ to h+k+ $g_2$ + $g_3$ +I.S.) . . . . .     | 6.6                   | 6.5 $\mu\text{f}$        |
| Output: (p to h+k+ $g_2$ + $g_3$ +I.S.) . . . . .         | 3.1                   | 1.8 $\mu\text{f}$        |
| <b>Triode Connection (<math>g_2</math> Tied to Plate)</b> |                       |                          |
| Grid to Plate ( $g_1$ to p+ $g_2$ ) . . . . .             | 2.5                   | 2.5 $\mu\text{f}$        |
| Input: ( $g_1$ to h+k+ $g_3$ +I.S.) . . . . .             | 3.6                   | 3.6 $\mu\text{f}$        |
| Output: (p+ $g_2$ to h+k+ $g_3$ +I.S.) . . . . .          | 4.3                   | 3.0 $\mu\text{f}$        |

### RATINGS (Design Center Values)

|                                          | Triode <sup>2</sup> | Pentode            |
|------------------------------------------|---------------------|--------------------|
| Plate Voltage . . . . .                  | 300                 | 300 Volts Max.     |
| Grid No. 2 Supply Voltage . . . . .      | Plate               | 300 Volts Max.     |
| Grid No. 2 Voltage . . . . .             | Plate               | (See Rating Chart) |
| Plate Dissipation . . . . .              | 2.5 <sup>3</sup>    | 2.0 Watts Max.     |
| Grid No. 2 Dissipation . . . . .         |                     | 0.5 Watt Max.      |
| Positive DC Grid No. 1 Voltage . . . . . | 0                   | 0 Volts Max.       |
| Heater Cathode Voltage . . . . .         | 90                  | 90 Volts Max.      |

### CHARACTERISTICS AND TYPICAL OPERATION

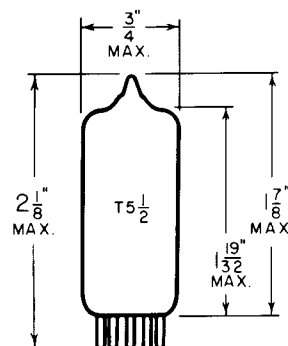
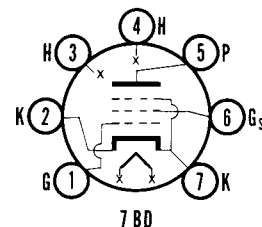
| Class A <sub>1</sub> Amplifier  | Triode <sup>2</sup> |                  | Pentode |      |                       |
|---------------------------------|---------------------|------------------|---------|------|-----------------------|
| Plate Voltage . . . . .         | 250                 | 180              | 100     | 125  | 250 Volts             |
| Grid No. 2 Voltage . . . . .    | Plate               | Plate            | 100     | 125  | 150 Volts             |
| Cathode Resistor . . . . .      | 820                 | 330              | 180     | 100  | 180 Ohms              |
| Plate Current . . . . .         | 5.5 <sup>3</sup>    | 7.0 <sup>3</sup> | 4.5     | 7.2  | 6.5 Ma                |
| Grid No. 2 Current . . . . .    |                     |                  | 1.4     | 2.1  | 2.0 Ma                |
| Transconductance . . . . .      | 3800                | 5700             | 4500    | 5100 | 5000 $\mu\text{mhos}$ |
| Plate Resistance                |                     |                  |         |      |                       |
| (approx.) . . . . .             | 0.01                | 0.008            | 0.6     | 0.5  | 0.8 Megohm            |
| Amplification Factor . . . . .  | 42                  | 45               |         |      |                       |
| Grid No. 1 Voltage for          |                     |                  |         |      |                       |
| $I_b = 10\mu\text{a}$ . . . . . |                     |                  | -5      | -6   | -8 Volts              |

### NOTES:

1. External shield No. 316 connected to Pin No. 7.
2. Grid No. 2 tied to plate.
3. Total current flowing to plate+grid No. 2.

## QUICK REFERENCE DATA

The Sylvania Type 6AG5 is a miniature sharp cutoff pentode designed for service as an if amplifier or rf amplifier at frequencies up to approximately 400 mc. The 6AG5 features low input and output capacitances and high gm. Isolation of input and output circuits is made possible through the use of two cathode leads.



SYLVANIA ELECTRIC  
PRODUCTS INC.

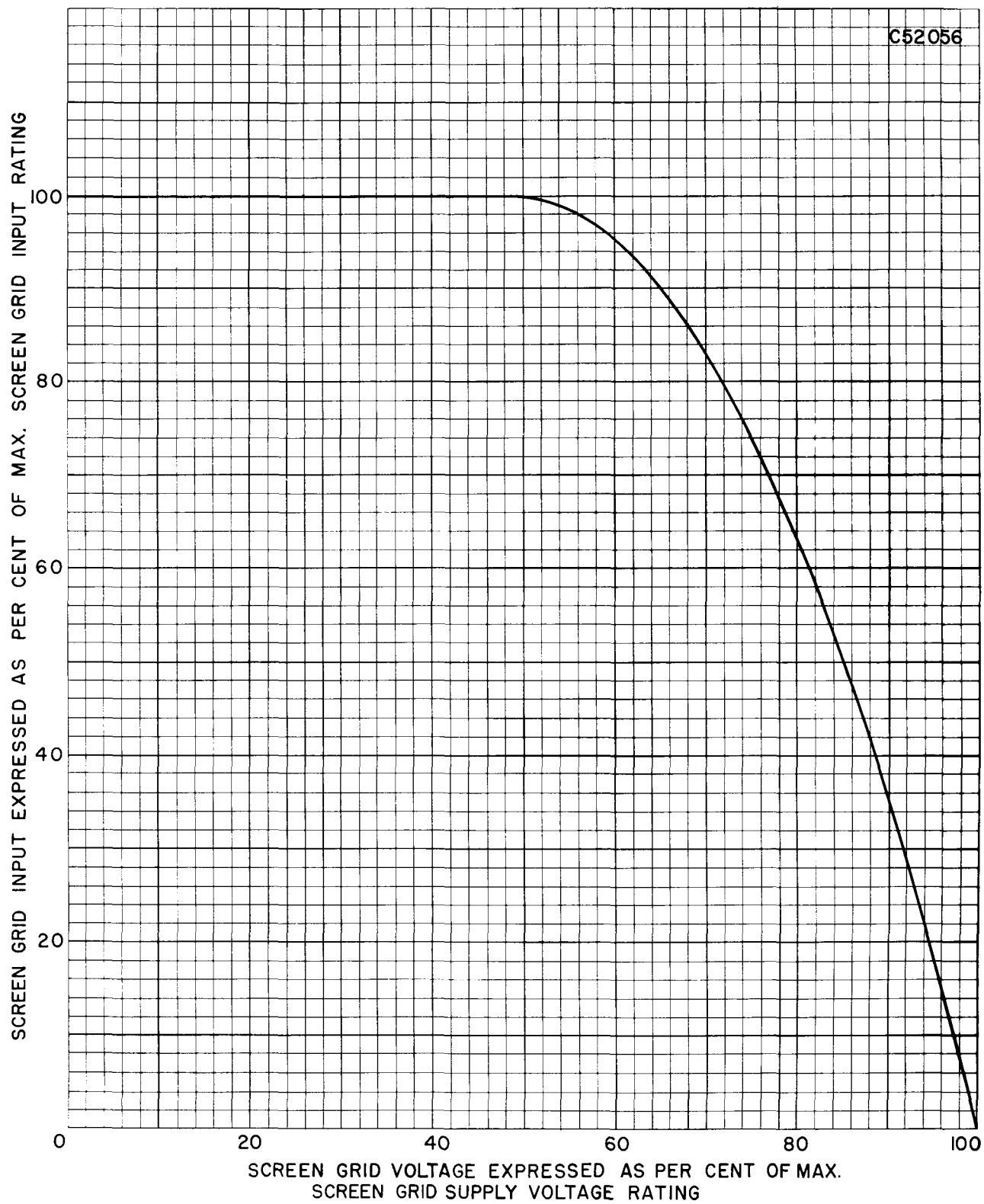
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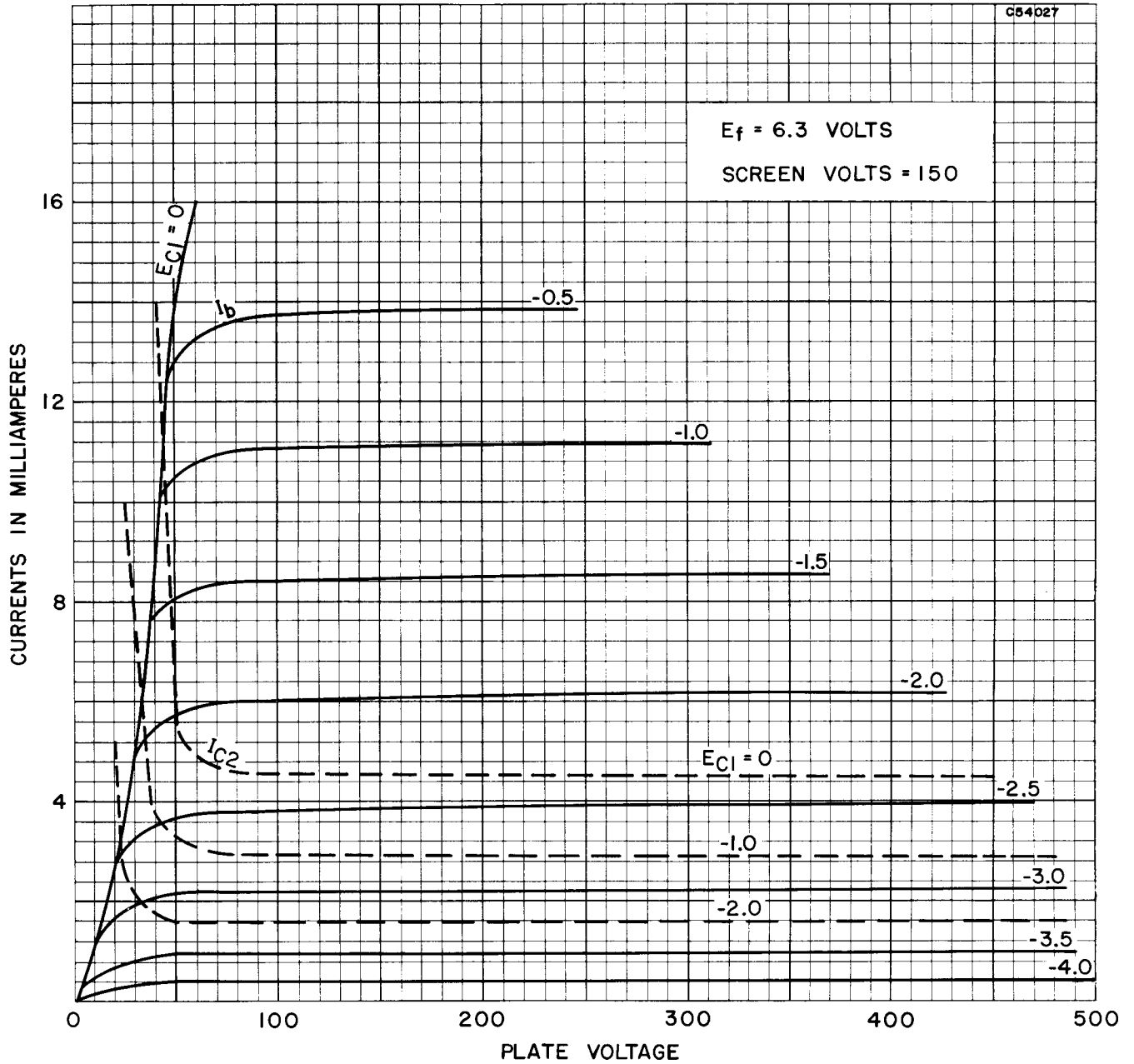
AUGUST, 1954

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## SCREEN GRID RATING CHART



AVERAGE PLATE CHARACTERISTICS



AVERAGE PLATE CHARACTERISTICS  
TRIODE CONNECTED