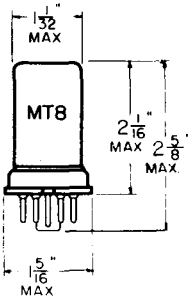


**TUNG-SOL****PENTODE****METAL SHELL**

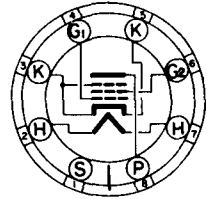
COATED UNIPOTENTIAL CATHODE

HEATER

12.6 VOLTS 150 MA.

AC OR DC

ANY MOUNTING POSITION

**BOTTOM VIEW**  
SMALL WAFER  
8 PIN OCTAL

THE 12SG7 IS A SEMI-REMOTE CUT OFF PENTODE VOLTAGE AMPLIFIER IN THE OCTAL-METAL CONSTRUCTION. IT FEATURES HIGH TRANSCONDUCTANCE WITH LOW GRID-PLATE CAPACITANCE AND A DUAL CATHODE CONNECTION TO MINIMIZE EFFECTS OF COMMON CATHODE CIRCUIT COUPLING.

**DIRECT INTERELECTRODE CAPACITANCES**

GRID TO PLATE: (G TO P) MAX.

INPUT:  $G_1$  TO (H+K+G<sub>3</sub>+G<sub>2</sub>)OUTPUT: P TO (H+K+G<sub>3</sub>+G<sub>2</sub>)**12SG7<sup>A</sup>**

0.003

 $\mu\text{mf}$ 

8.5

 $\mu\text{mf}$ 

7

 $\mu\text{mf}$ <sup>A</sup> WITH SHELL CONNECTED TO CATHODE.**RATINGS**

INTERPRETED ACCORDING TO RMA STANDARD MB-210

|                                  |      |       |
|----------------------------------|------|-------|
| HEATER VOLTAGE                   | 12.6 | VOLTS |
| MAXIMUM HEATER-CATHODE VOLTAGE   | 90   | VOLTS |
| MAXIMUM PLATE VOLTAGE            | 300  | VOLTS |
| MAXIMUM GRID #2 VOLTAGE          | 200  | VOLTS |
| MAXIMUM GRID #2 SUPPLY VOLTAGE   | 300  | VOLTS |
| MINIMUM EXTERNAL GRID #1 VOLTAGE | 0    | VOLTS |
| MAXIMUM PLATE DISSIPATION        | 3    | WATTS |
| MAXIMUM GRID #2 DISSIPATION      | 0.6  | WATT  |

CONTINUED ON NEXT PAGE

## TUNG-SOL

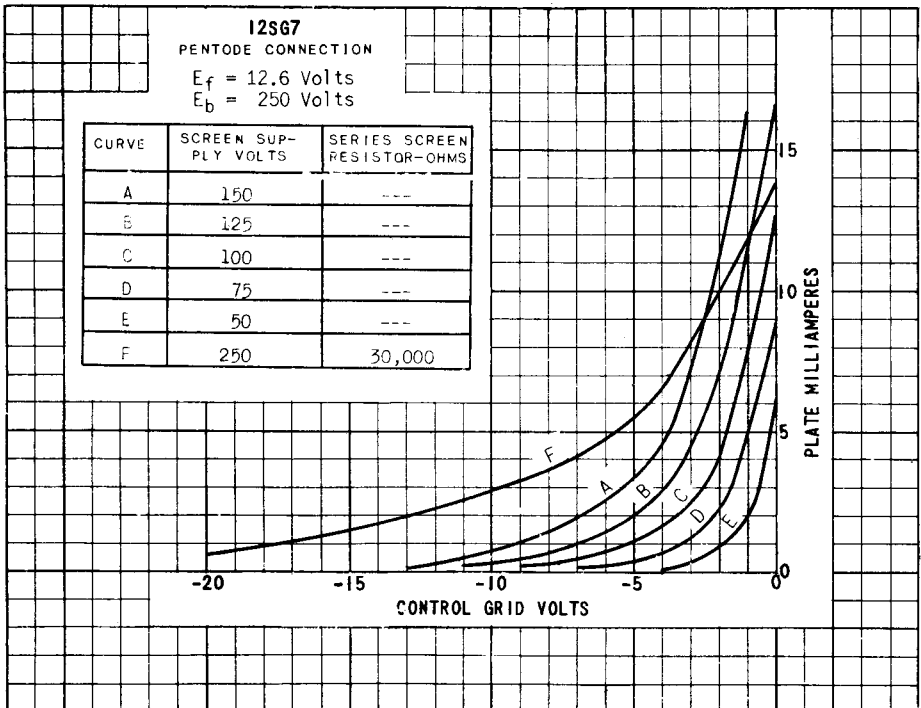
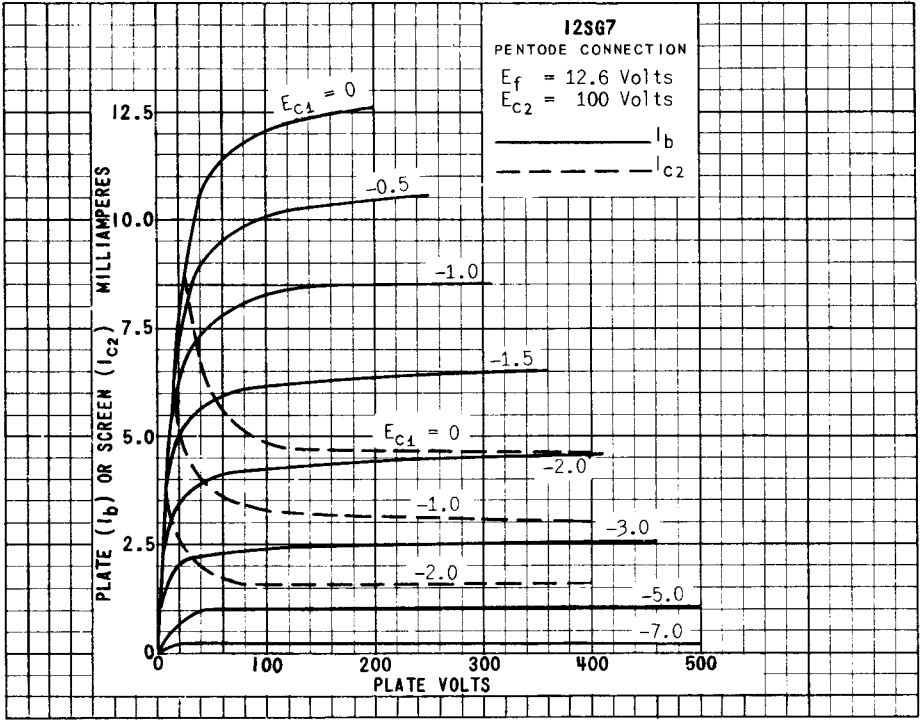
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## TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A<sub>1</sub> AMPLIFIER

|                                                            |       |      |              |        |
|------------------------------------------------------------|-------|------|--------------|--------|
| HEATER VOLTAGE                                             | 12.6  | 12.6 | 12.6         | VOLTS  |
| HEATER CURRENT                                             | 150   | 150  | 150          | MA.    |
| PLATE VOLTAGE                                              | 100   | 250  | 250          | VOLTS  |
| GRID #2 VOLTAGE                                            | 100   | 125  | 150          | VOLTS  |
| GRID #1 VOLTAGE                                            | -1    | -1   | -2.5         | VOLTS  |
| SELF BIAS RESISTOR                                         | 90    | 60   | 190          | OHMS   |
| PLATE RESISTANCE (APPROX.)                                 | 0.25  | 0.9  | <sup>C</sup> | MEGOHM |
| TRANSCONDUCTANCE                                           | 4100  | 4700 | 4000         | μMHOS  |
| PLATE CURRENT                                              | 8.2   | 11.8 | 9.2          | MA.    |
| GRID #2 CURRENT                                            | 3.2   | 4.4  | 3.4          | MA.    |
| GRID #1 VOLTAGE (APPROX.) FOR<br>g <sub>m</sub> = 40 μMHOS | -11.5 | -14  | -17.5        | VOLTS  |

<sup>C</sup> GREATER THAN 1.0 MEGOHM.
 PLATE  
2065  
AUG. 2,  
1948



# 12SG7(6SG7, 6SG7GT)

