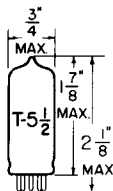


## TUNG-SOL

## PENTODE

## MINIATURE TYPE



GLASS BULB

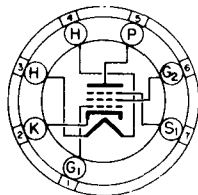
COATED UNIPOTENTIAL CATHODE

HEATER

6.3 VOLTS 150 MA.

AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW

MINIATURE BUTTON  
7 PIN BASE

7CM

THE 6BJ6, 6BJ6A ARE PENTODE VOLTAGE AMPLIFIERS WITH REMOTE CONTROL CHARACTERISTICS UTILIZING THE MINIATURE CONSTRUCTION. THEY ARE CHARACTERIZED BY HIGH TRANSCONDUCTANCE, LOW GRID-PLATE CAPACITANCE, AND AN EXTREMELY HIGH EFFICIENCY CATHODE ADAPTING THEM TO APPLICATION WHERE CONSERVATION OF HEATER POWER IS IMPORTANT.

## DIRECT INTERELECTRODE CAPACITANCES

|                                                                   | WITH<br>SHIELD <sup>A</sup> | WITHOUT<br>SHIELD |                  |
|-------------------------------------------------------------------|-----------------------------|-------------------|------------------|
| GRID TO PLATE: (G TO P) MAX.                                      | 0.0035                      | 0.0035            | $\mu\mu\text{f}$ |
| INPUT: G <sub>1</sub> TO (H+K+G <sub>2</sub> +G <sub>3</sub> +IS) | 4.5                         | 4.5               | $\mu\mu\text{f}$ |
| OUTPUT: P TO (H+K+G <sub>2</sub> +G <sub>3</sub> +IS)             | 5.5                         | 5.5               | $\mu\mu\text{f}$ |

<sup>A</sup> EXTERNAL SHIELD #316 CONNECTED TO PINS #2 AND #7.

## RATINGS

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

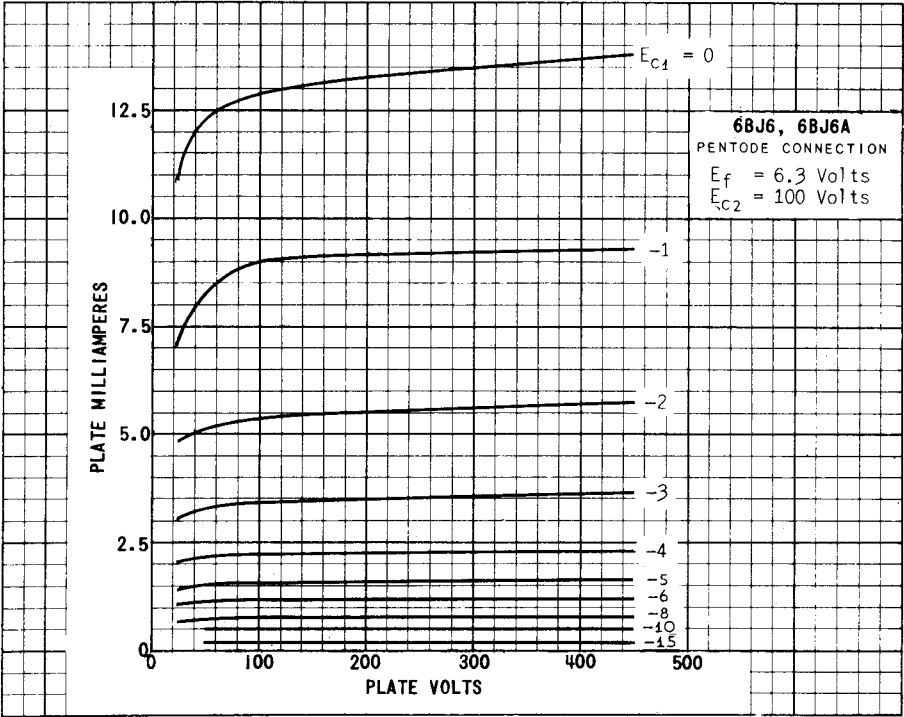
|                                     |           |       |
|-------------------------------------|-----------|-------|
| HEATER VOLTAGE                      | 6.3       | VOLTS |
| MAXIMUM HEATER-CATHODE VOLTAGE      | 90        | VOLTS |
| MAXIMUM PLATE VOLTAGE               | 300       | VOLTS |
| MAXIMUM GRID #2 SUPPLY VOLTAGE      | 300       | VOLTS |
| MAXIMUM GRID #2 VOLTAGE             | SFE J5-C4 | VOLTS |
| MAXIMUM PLATE DISSIPATION           | 3.0       | WATTS |
| MAXIMUM GRID #2 DISSIPATION         | 0.6       | WATTS |
| MAXIMUM POSITIVE DC GRID #1 VOLTAGE | 0         | VOLTS |
| MAXIMUM NEGATIVE DC GRID #1 VOLTAGE | 50        | VOLTS |

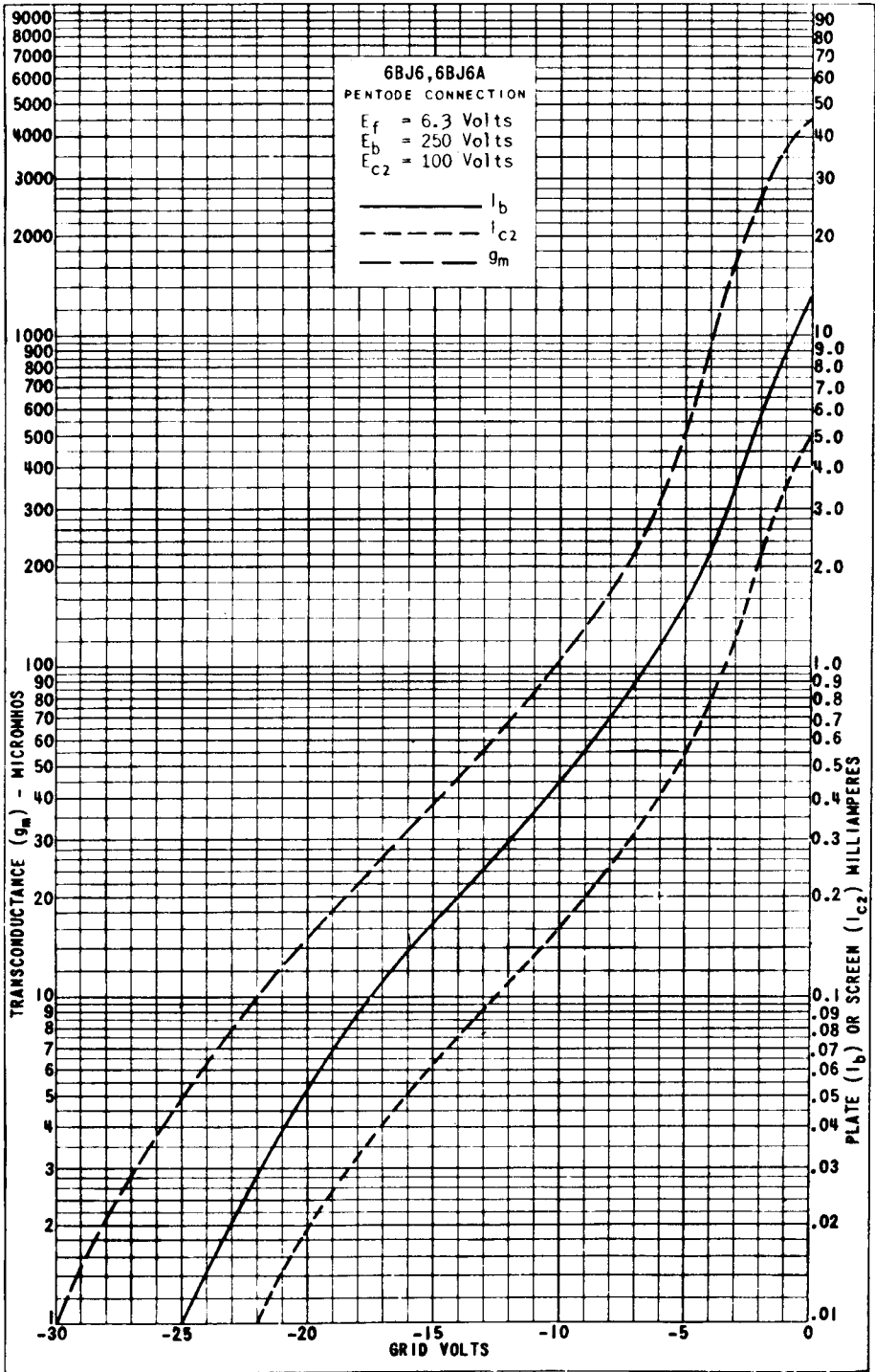
## TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A<sub>1</sub> AMPLIFIER

|                                                          |                                      |       |                  |
|----------------------------------------------------------|--------------------------------------|-------|------------------|
| HEATER VOLTAGE                                           | 6.3                                  | 6.3   | VOLTS            |
| HEATER CURRENT                                           | 150                                  | 150   | MA.              |
| PLATE VOLTAGE                                            | 100                                  | 250   | VOLTS            |
| GRID #3 VOLTAGE                                          | PIN #7 CONNECTED TO PIN #2 AT SOCKET |       |                  |
| GRID #2 VOLTAGE                                          | 100                                  | 100   | VOLTS            |
| GRID #1 VOLTAGE                                          | -1.0                                 | -1.0  | VOLTS            |
| PLATE RESISTANCE (APPROX.)                               | 0.25                                 | 1.3   | MEGOHMS          |
| TRANSCONDUCTANCE                                         | 3 650                                | 3 600 | $\mu\text{MHOS}$ |
| PLATE CURRENT                                            | 9                                    | 9.2   | MA.              |
| GRID #2 CURRENT                                          | 3.5                                  | 3.3   | MA.              |
| GRID #1 VOLTAGE FOR G <sub>m</sub> = 10 $\mu\text{MHOS}$ | -20                                  | -20   | VOLTS            |

THE INTERFACE IMPEDANCE CONTROL CONSISTS OF A LIFE TEST CONDUCTED FOR 500 HOURS WITH THE FILAMENT OPERATING WITH 6.9 VOLTS IMPOSED. THE OTHER TUBE ELEMENTS ARE UNCONNECTED SIMULATING OPERATION AT CUTOFF CONDITIONS. FOLLOWING LIFE TEST THE SAMPLE TUBES ARE MEASURED AT CONDITIONS E<sub>f</sub>=5.7V; E<sub>b</sub>=E<sub>c2</sub>=E<sub>c3</sub>=70Vdc; AND E<sub>c1</sub> ADJUSTED FOR I<sub>b</sub>=4.0 mAdc. THE MAXIMUM ALLOWABLE VALUE FOR INTERFACE IMPEDANCE IS 70 OHMS. (NOTE IS FOR 6BJ6A ONLY)





6BJ6, 6BJ6A  
PENTODE CONNECTION  
 $E_f = 6.3$  Volts  
 $E_b = 250$  Volts  
 $E_{c1} = -1$  Volt  
—  $I_b$   
---  $I_{c2}$   
- - -  $g_m$   
- · - ·  $r_p$

