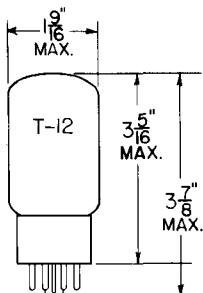


**TUNG-SOL****DUAL PENTODE****GLASS BULB**

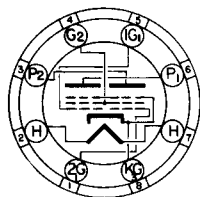
COATED UNIPOTENTIAL CATHODE

HEATER

6.3 VOLTS 1.2 AMP.

AC OR DC

ANY MOUNTING POSITION

**BOTTOM VIEW**SHORT MEDIUM SHELL  
8 PIN OCTAL

8 J P

THE 6DY7 IS A DUAL BEAM POWER PENTODE IN THE 8 PIN OCTAL CONSTRUCTION. IT IS DESIGNED FOR APPLICATION IN STEREOPHONIC SOUND SYSTEMS.

**RATINGS**

INTERPRETED ACCORDING TO DESIGN MAXIMUM SYSTEM<sup>A</sup>  
EACH SECTION

|                                         |      |        |
|-----------------------------------------|------|--------|
| HEATER VOLTAGE                          | 6.3  | VOLTS  |
| MAXIMUM PLATE VOLTAGE                   | 400  | VOLTS  |
| MAXIMUM GRID #2 VOLTAGE                 | 300  | VOLTS  |
| MAXIMUM PLATE DISSIPATION               | 15   | WATTS  |
| MAXIMUM GRID #2 DISSIPATION             | 2.0  | WATTS  |
| MAXIMUM GRID #1 CIRCUIT RESISTANCE      |      |        |
| FIXED BIAS                              | 0.1  | MEGOHM |
| SELF BIAS                               | 0.47 | MEGOHM |
| MAXIMUM HEATER-CATHODE VOLTAGE:         |      |        |
| HEATER POSITIVE WITH RESPECT TO CATHODE |      |        |
| TOTAL DC AND PEAK                       | 200  | VOLTS  |
| HEATER NEGATIVE WITH RESPECT TO CATHODE |      |        |
| DC                                      | 100  | VOLTS  |
| TOTAL DC AND PEAK                       | 200  | VOLTS  |

**TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS**

AVERAGE CHARACTERISTICS — EACH SECTION

|                            |        |       |
|----------------------------|--------|-------|
| HEATER VOLTAGE             | 6.3    | VOLTS |
| HEATER CURRENT             | 1.2    | AMPS. |
| PLATE VOLTAGE              | 250    | VOLTS |
| GRID #2 VOLTAGE            | 250    | VOLTS |
| GRID #1 VOLTAGE            | -12.5  | VOLTS |
| PLATE CURRENT              | 50     | MA.   |
| GRID #2 CURRENT            | 3.0    | MA.   |
| TRANSCONDUCTANCE           | 6 000  | μMHOS |
| PLATE RESISTANCE (APPROX.) | 28 000 | OHMS  |

CONTINUED ON FOLLOWING PAGE

## TUNG-SOL

CONTINUED FROM PRECEDING PAGE

## TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS - CONT'D.

CLASS AB<sub>1</sub> AMPLIFIER (TWO SECTIONS IN PUSH-PULL)

|                                  |       |        |         |
|----------------------------------|-------|--------|---------|
| HEATER VOLTAGE                   | 6.3   | 6.3    | VOLTS   |
| HEATER CURRENT                   | 1.2   | 1.2    | AMP.    |
| PLATE VOLTAGE                    | 250   | 400    | VOLTS   |
| GRID #2 VOLTAGE                  | 250   | 250    | VOLTS   |
| GRID #1 VOLTAGE                  | -16   | -20    | VOLTS   |
| PEAK AF GRID TO GRID VOLTAGE     | 32    | 40     | VOLTS   |
| ZERO SIGNAL PLATE CURRENT        | 77    | 58     | MA.     |
| MAXIMUM SIGNAL PLATE CURRENT     | 74    | 74     | MA.     |
| ZERO SIGNAL GRID #2 CURRENT      | 3.5   | 1.7    | MA.     |
| MAXIMUM SIGNAL GRID #2 CURRENT   | 15.5  | 14.0   | MA.     |
| LOAD RESISTANCE (PLATE TO PLATE) | 9 000 | 14 000 | OHMS    |
| MAXIMUM SIGNAL POWER OUTPUT      | 11    | 20     | WATTS   |
| TOTAL HARMONIC DISTORTION        | 2.5   | 2.0    | PERCENT |

CLASS A<sub>1</sub> - SINGLE SECTION<sup>B</sup>

|                                |       |         |
|--------------------------------|-------|---------|
| PLATE VOLTAGE                  | 250   | VOLTS   |
| GRID #2 VOLTAGE                | 250   | VOLTS   |
| GRID #1 VOLTAGE                | -12.5 | VOLTS   |
| PEAK AF SIGNAL VOLTAGE         | 12.5  | VOLTS   |
| ZERO SIGNAL PLATE CURRENT      | 50    | MA.     |
| MAXIMUM SIGNAL PLATE CURRENT   | 45    | MA.     |
| ZERO SIGNAL GRID #2 CURRENT    | 3.0   | MA.     |
| MAXIMUM SIGNAL GRID #2 CURRENT | 9.0   | MA.     |
| LOAD RESISTANCE                | 5 000 | OHMS    |
| MAXIMUM SIGNAL POWER OUTPUT    | 5.0   | WATTS   |
| TOTAL HARMONIC DISTORTION      | 9.0   | PERCENT |

A

DESIGN-MAXIMUM RATINGS ARE LIMITING VALUES OF OPERATING AND ENVIRONMENTAL CONDITIONS APPLICABLE TO A BOGEY ELECTRON DEVICE OF A SPECIFIED TYPE AS DEFINED BY ITS PUBLISHED DATA, AND SHOULD NOT BE EXCEEDED UNDER THE WORST PROBABLE CONDITIONS. THE DEVICE MANUFACTURER CHOOSES THESE VALUES TO PROVIDE ACCEPTABLE SERVICEABILITY OF THE DEVICE, TAKING RESPONSIBILITY FOR THE EFFECTS OF CHANGES IN OPERATING CONDITIONS DUE TO VARIATIONS IN DEVICE CHARACTERISTICS. THE EQUIPMENT MANUFACTURER SHOULD DESIGN SO THAT INITIALLY AND THROUGHOUT LIFE NO DESIGN-MAXIMUM VALUE FOR THE INTENDED SERVICE IS EXCEEDED WITH A BOGEY DEVICE UNDER THE WORST PROBABLE OPERATING CONDITIONS WITH RESPECT TO SUPPLY-VOLTAGE VARIATION, EQUIPMENT COMPONENT VARIATION, EQUIPMENT CONTROL ADJUSTMENT, LOAD VARIATION, SIGNAL VARIATION, AND ENVIRONMENTAL CONDITIONS.

<sup>B</sup> THE EFFECTS OF CROSS-COUPPLING BETWEEN SECTIONS, WITH BOTH SECTIONS OPERATING SIMULTANEOUSLY AS SINGLE CHANNEL CLASS A<sub>1</sub> AMPLIFIERS, IS 50 db DOWN.