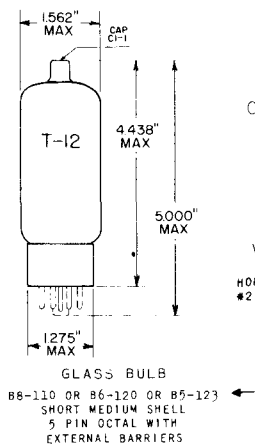


## TUNG-SOL

## BEAM POWER PENTODE



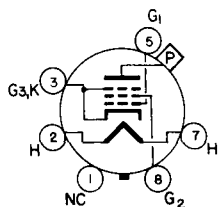
COATED UNIPOTENTIAL CATHODE

HEATER

6.3 VOLTS 0.9 AMP.

AC OR DC

VERTICAL MOUNTING POSITION

 HORIZONTAL OPERATION PERMITTED IF PINS  
 #2 AND #7 ARE IN A VERTICAL PLANE.


BOTTOM VIEW

BASING DIAGRAM

JEDEC 5BT

THE 6BG6GA IS A BEAM-POWER PENTODE DESIGNED PRIMARILY FOR USE AS THE HORIZONTAL-DEFLECTION AMPLIFIER IN TELEVISION RECEIVERS. ELECTRICALLY AND PHYSICALLY, THE 6BG6GA IS A REPLACEMENT FOR THE 6BG6G; IT DIFFERS PRIMARILY FROM THE 6BG6G BY EMPLOYING A STRAIGHT-SIDED T-12 ENVELOPE.

 DIRECT INTERELECTRODE CAPACITANCES — APPROX.  
 WITHOUT EXTERNAL SHIELD

|                  |      |    |
|------------------|------|----|
| GRID #1 TO PLATE | 0.8  | pf |
| INPUT            | 11.0 | pf |
| OUTPUT           | 6.0  | pf |

## RATINGS

 INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM  
 HORIZONTAL DEFLECTION AMPLIFIER<sup>A</sup>

|                                                       |      |        |
|-------------------------------------------------------|------|--------|
| MAXIMUM DC PLATE SUPPLY VOLTAGE                       | 700  | VOLTS  |
| MAXIMUM PEAK POSITIVE PULSE PLATE VOLTAGE (ABS. MAX.) | 6600 | VOLTS  |
| MAXIMUM PEAK NEGATIVE PULSE PLATE VOLTAGE             | 1500 | VOLTS  |
| MAXIMUM PLATE DISSIPATION <sup>B</sup>                | 20   | WATTS  |
| MAXIMUM PEAK NEGATIVE GRID #1 VOLTAGE                 | 300  | VOLTS  |
| MAXIMUM GRID #2 VOLTAGE                               | 350  | VOLTS  |
| MAXIMUM GRID #2 DISSIPATION                           | 3.2  | WATTS  |
| MAXIMUM DC CATHODE CURRENT                            | 110  | MA.    |
| MAXIMUM PEAK CATHODE CURRENT                          | 400  | MA.    |
| MAXIMUM GRID #1 CIRCUIT RESISTANCE                    | 0.47 | MEGOHM |
| MAXIMUM BULB TEMPERATURE (AT HOTTEST POINT)           | 210  | °C     |

<sup>A</sup> FOR OPERATION IN A 525-LINE, 30-FRAME SYSTEM AS DESCRIBED IN "STANDARDS OF GOOD ENGINEERING PRACTICE FOR TELEVISION BROADCAST STATIONS: FEDERAL COMMUNICATIONS COMMISSION", THE DUTY CYCLE OF THE VOLTAGE PULSE MUST NOT EXCEED 15% OF ONE SCANNING CYCLE.

<sup>B</sup> IN STAGES OPERATING WITH GRID-LEAK BIAS, AN ADEQUATE CATHODE-BIAS RESISTOR OR OTHER SUITABLE MEANS IS REQUIRED TO PROTECT THE TUBE IN THE ABSENCE OF EXCITATION.

→ INDICATES A CHANGE.

CONTINUED ON FOLLOWING PAGE

## TUNG-SOL

CONTINUED FROM PRECEDING PAGE

**RATINGS — CONT'D**  
 INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM  
 HORIZONTAL DEFLECTION AMPLIFIER<sup>A</sup>

## MAXIMUM HEATER-CATHODE VOLTAGE:

|                                                              |     |       |
|--------------------------------------------------------------|-----|-------|
| HEATER NEGATIVE WITH RESPECT TO CATHODE<br>TOTAL DC AND PEAK | 200 | VOLTS |
| HEATER POSITIVE WITH RESPECT TO CATHODE<br>DC                | 100 | VOLTS |
| TOTAL DC AND PEAK                                            | 200 | VOLTS |

## TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

|                                               |     |        |       |
|-----------------------------------------------|-----|--------|-------|
| PLATE VOLTAGE                                 | 60  | 250    | VOLTS |
| GRID #2 VOLTAGE                               | 250 | 250    | VOLTS |
| PLATE CURRENT                                 | 180 | 75     | MA.   |
| GRID #2 CURRENT                               | 18  | 4.0    | MA.   |
| GRID #1 VOLTAGE                               | 0   | -15    | VOLTS |
| PLATE RESISTANCE (APPROX.)                    |     | 25 000 | OHMS  |
| TRANSCONDUCTANCE                              |     | 6 000  | μMHOS |
| GRID #1 VOLTAGE (APPROX.) FOR $I_b = 1.0$ MA. |     | -45    | VOLTS |
| TRIODE AMPLIFICATION FACTOR <sup>C</sup>      |     | 8.0    |       |

<sup>C</sup> TRIODE CONNECTED (GRID #2 TIED TO PLATE):  $E_b = E_{c2} = 250$  VOLTS AND  $E_{c1} = -15$  VOLTS.