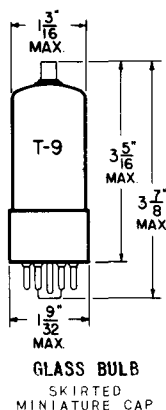


## TUNG-SOL

## PENTODE



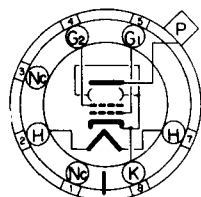
COATED UNIPOTENTIAL CATHODE

HEATER

6.3 VOLTS 1.2 AMP.

AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW

INTERMEDIATE SHELL  
OR  
SHORT INTERMEDIATE SHELL  
7 PIN OCTAL

6AM

THE 6BQ6GTB IS A BEAM POWER AMPLIFIER DESIGNED FOR USE AS A HORIZONTAL DEFLECTION AMPLIFIER IN TELEVISION RECEIVERS.

## DIRECT INTERELECTRODE CAPACITANCES — APPROX.

|               |     |    |
|---------------|-----|----|
| GRID TO PLATE | 0.6 | μf |
| INPUT         | 15  | μf |
| OUTPUT        | 7   | μf |

## RATINGS

INTERPRETED ACCORDING TO DESIGN CENTER VALUES  
(UNLESS OTHERWISE SPECIFIED)

HORIZONTAL DEFLECTION AMPLIFIER<sup>A</sup>

|                                                              |       |        |
|--------------------------------------------------------------|-------|--------|
| HEATER VOLTAGE                                               | 6.3   | VOLTS  |
| MAXIMUM HEATER-CATHODE VOLTAGE:                              |       |        |
| HEATER NEGATIVE WITH RESPECT TO CATHODE                      |       |        |
| TOTAL DC AND PEAK                                            | 200   | VOLTS  |
| HEATER POSITIVE WITH RESPECT TO CATHODE                      |       |        |
| DC                                                           | 100   | VOLTS  |
| TOTAL DC AND PEAK                                            | 200   | VOLTS  |
| MAXIMUM DC PLATE SUPPLY VOLTAGE<br>(BOOST + DC POWER SUPPLY) | 600   | VOLTS  |
| MAXIMUM PEAK POSITIVE PLATE VOLTAGE (ABSOLUTE MAX.)          | 6 000 | VOLTS  |
| MAXIMUM PEAK NEGATIVE PLATE VOLTAGE                          | 1 250 | VOLTS  |
| MAXIMUM PLATE DISSIPATION <sup>B</sup>                       | 11    | WATTS  |
| MAXIMUM PEAK NEGATIVE GRID #1 VOLTAGE                        | 300   | VOLTS  |
| MAXIMUM DC GRID #2 VOLTAGE                                   | 200   | VOLTS  |
| MAXIMUM GRID #2 DISSIPATION                                  | 2.5   | WATTS  |
| MAXIMUM AVERAGE CATHODE CURRENT                              | 110   | MA.    |
| MAXIMUM PEAK CATHODE CURRENT                                 | 400   | MA.    |
| MAXIMUM GRID #1 CIRCUIT RESISTANCE                           | 0.47  | MEGOHM |
| MAXIMUM BULB TEMPERATURE (AT HOTTEST POINT)                  | 220   | °C     |

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

CONTINUED ON FOLLOWING PAGE

## TUNG-SOL

CONTINUED FROM PRECEDING PAGE

## TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

|                                          |        |            |
|------------------------------------------|--------|------------|
| HEATER VOLTAGE                           | 6.3    | VOLTS      |
| HEATER CURRENT                           | 1.2    | AMP.       |
| PENTODE OPERATION: <sup>C</sup>          |        |            |
| PLATE CURRENT                            | 57     | MA.        |
| GRID #2 CURRENT                          | 2.1    | MA.        |
| TRANSCONDUCTANCE                         | 5 900  | $\mu$ MHOS |
| PLATE RESISTANCE                         | 14 500 | OHMS       |
| ZERO BIAS: <sup>D</sup>                  |        |            |
| PLATE CURRENT                            | 260    | MA.        |
| GRID #2 CURRENT                          | 26     | MA.        |
| CUTOFF: <sup>E</sup>                     |        |            |
| GRID #1 VOLTAGE (APPROX.)                | -43    | VOLTS      |
| TRIODE AMPLIFICATION FACTOR <sup>F</sup> | 4.3    |            |

**SIMILAR TYPE REFERENCE:** Except for heater characteristics, the 6BQ6GTB is identical to the 17BQ6GTB.

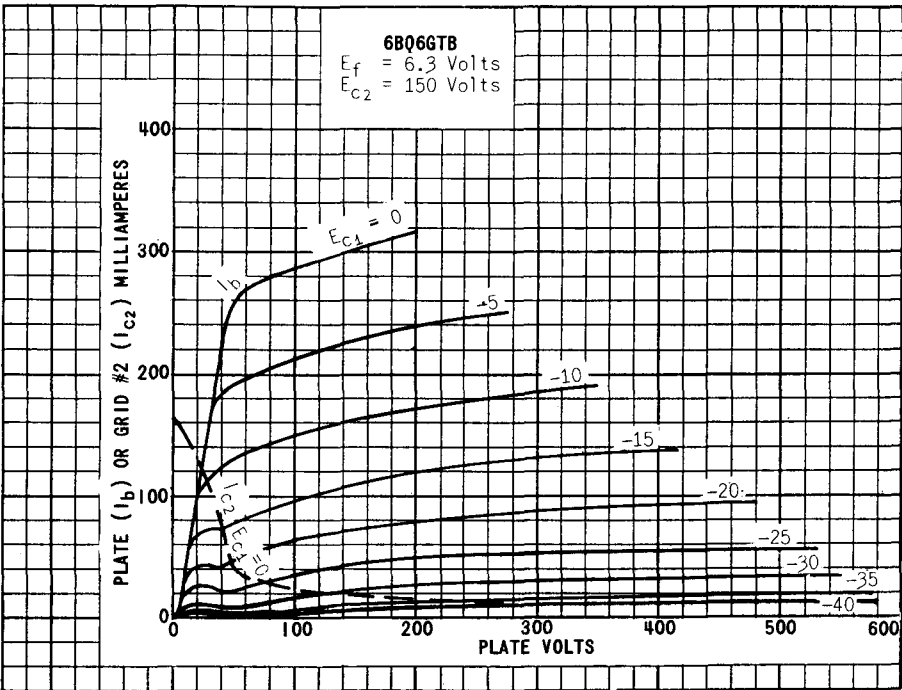
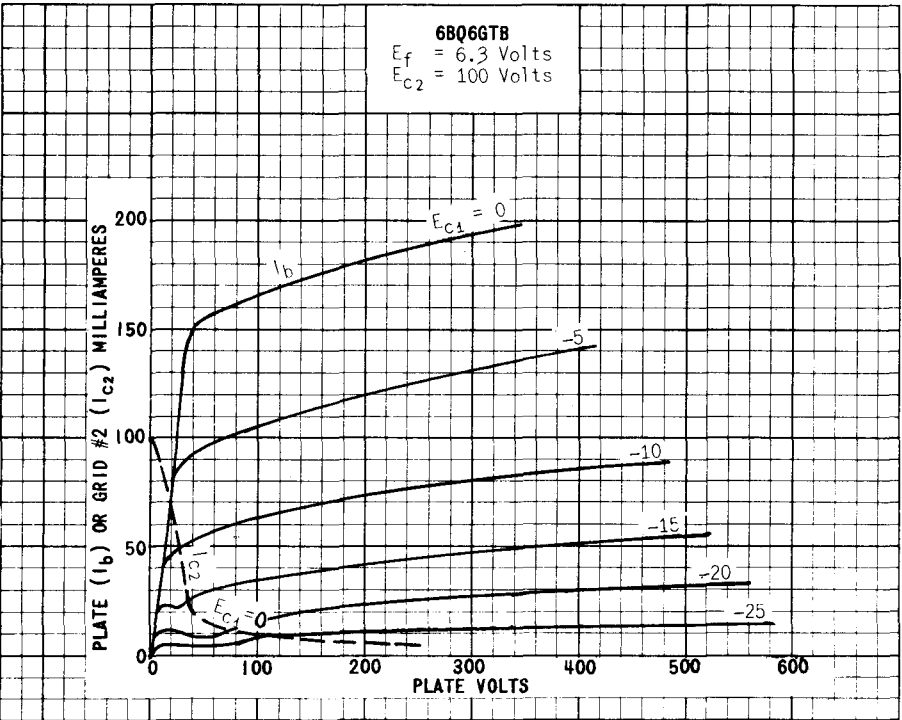
THE ELECTRICAL DATA AND PIN CONNECTION FOR TYPE 6BQ6GTB ARE IDENTICAL WITH THOSE OF TYPES 6BQ6GA AND 6CU6.

<sup>C</sup> WITH  $E_b = 250V$ ,  $E_{c2} = 150V$ , AND  $E_{c1} = -22.5V$ .

<sup>D</sup> WITH  $E_b = 60V$ , AND  $E_{c2} = 150V$ . (INSTANTANEOUS VALUES)

<sup>E</sup> FOR  $I_b = 1$  MA. WITH  $E_b = 250V$ , AND  $E_{c2} = 150V$ .

<sup>F</sup> WITH  $E_b = E_{c2} = 150V$ , AND  $E_{c1} = -22.5V$ .



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