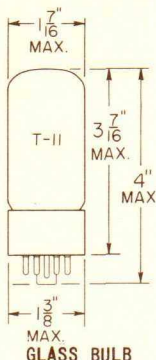


## TUNG-SOL

## PENTODE



THE MAX. DIAMETER  
OF THE T-12 BULB IS  
1.9/16"

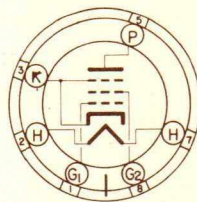
COATED UNIPOTENTIAL CATHODE

HEATER

25.0 VOLTS 0.3 AMP.

AC OR DC

ANY MOUNTING POSITION



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

6CK

THE 25AV5GA IS A BEAM PENTODE DESIGNED FOR USE AS A HORIZONTAL-DEFLECTION  
AMPLIFIER IN TELEVISION RECEIVERS. IT USES EITHER A T-11 OR T-12 BULB.

**DIRECT INTERELECTRODE CAPACITANCES** — APPROX.  
WITH NO EXTERNAL SHIELD

|                  |     |    |
|------------------|-----|----|
| GRID #1 TO PLATE | 0.5 | μf |
| INPUT            | 14  | μf |
| OUTPUT           | 7.0 | μf |

**RATINGS**

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

|                                                           |                    |         |
|-----------------------------------------------------------|--------------------|---------|
| HEATER VOLTAGE                                            | 25.0               | VOLTS   |
| MAXIMUM HEATER-CATHODE VOLTAGE:                           |                    |         |
| HEATER POSITIVE WITH RESPECT TO CATHODE                   |                    |         |
| TOTAL DC AND PEAK                                         | 200                | VOLTS   |
| DC                                                        | 100                | VOLTS   |
| HEATER NEGATIVE WITH RESPECT TO CATHODE                   |                    |         |
| TOTAL DC AND PEAK                                         | 200                | VOLTS   |
| MAXIMUM DC PLATE-SUPPLY VOLTAGE (BOOST + POWER SUPPLY)    | 550                | VOLTS   |
| MAXIMUM PEAK POSITIVE PULSE PLATE VOLTAGE (ABSOLUTE MAX.) | 5 500 <sup>C</sup> | VOLTS   |
| MAXIMUM PEAK NEGATIVE PULSE PLATE VOLTAGE                 | 1 250              | VOLTS   |
| MAXIMUM GRID #2 VOLTAGE                                   | 175                | VOLTS   |
| MAXIMUM PEAK NEGATIVE GRID #1 VOLTAGE                     | 300                | VOLTS   |
| MAXIMUM PLATE DISSIPATION <sup>D</sup>                    | 11                 | WATTS   |
| MAXIMUM GRID #2 DISSIPATION                               | 2.5                | 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      |
| HEATER WARM-UP TIME (APPROX.)*                            | 11.0               | SECONDS |

<sup>A</sup> UNLESS OTHERWISE SPECIFIED.

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

<sup>C</sup> THIS VALUE MUST NOT BE EXCEEDED.

<sup>D</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.

\* HEATER WARM-UP TIME IS DEFINED AS THE TIME REQUIRED FOR THE VOLTAGE ACROSS THE HEATER TO REACH  
80% OF ITS RATED VOLTAGE AFTER APPLYING 4 TIMES RATED HEATER VOLTAGE TO A CIRCUIT CONSISTING  
OF THE TUBE HEATER IN SERIES WITH A RESISTANCE OF VALUE 3 TIMES THE NOMINAL HEATER OPERATION  
RESISTANCE.

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TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

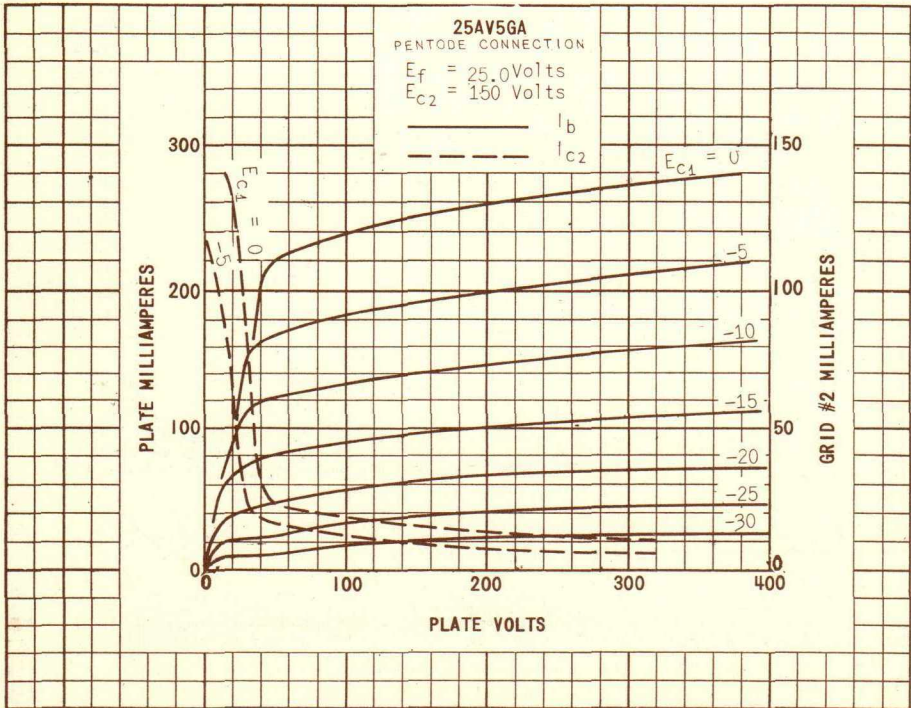
|                                          |                  |                          |
|------------------------------------------|------------------|--------------------------|
| HEATER VOLTAGE                           | 25.0             | VOLTS                    |
| HEATER CURRENT                           | 0.3              | AMP.                     |
| PLATE VOLTAGE                            | 250              | VOLTS                    |
| GRID #2 VOLTAGE                          | 150              | VOLTS                    |
| GRID #1 VOLTAGE                          | 0 <sup>E</sup>   | -22.5 VOLTS              |
| PLATE RESISTANCE (APPROX.)               | ---              | 14 500 <sup>←</sup> OHMS |
| TRANSCONDUCTANCE                         | ---              | 5 900 <sup>←</sup> μMHOS |
| PLATE CURRENT                            | 260 <sup>←</sup> | 57 <sup>←</sup> MA.      |
| GRID #2 CURRENT                          | 26 <sup>←</sup>  | 2.1 <sup>←</sup> MA.     |
| GRID #1 VOLTAGE (APPROX.)                | ---              | -43 <sup>←</sup> VOLTS   |
| FOR $I_b = 1.0$ MA.                      | ---              |                          |
| TRIODE AMPLIFICATION FACTOR <sup>F</sup> | ---              | 4.3                      |

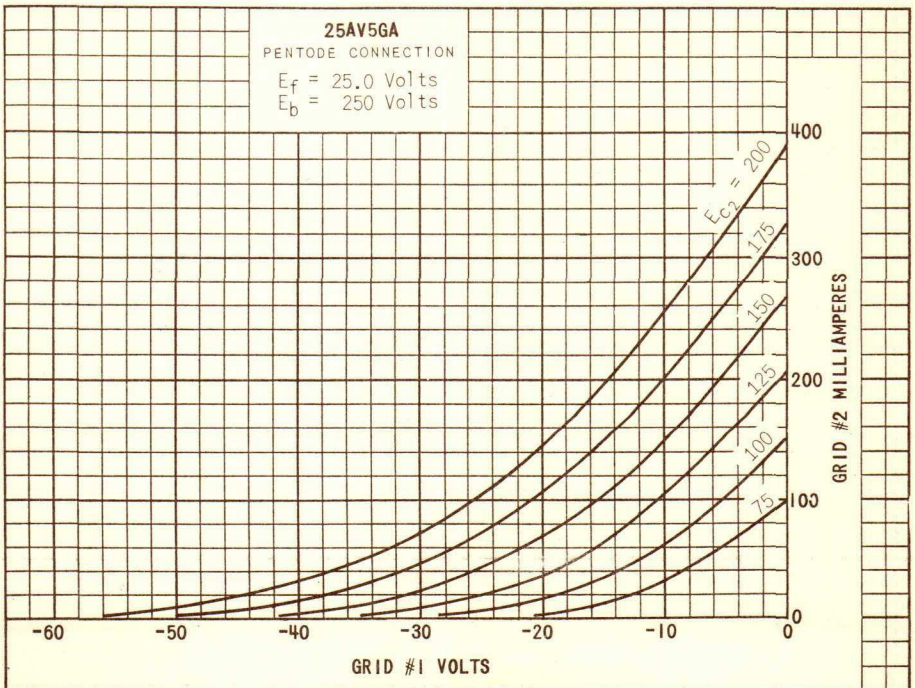
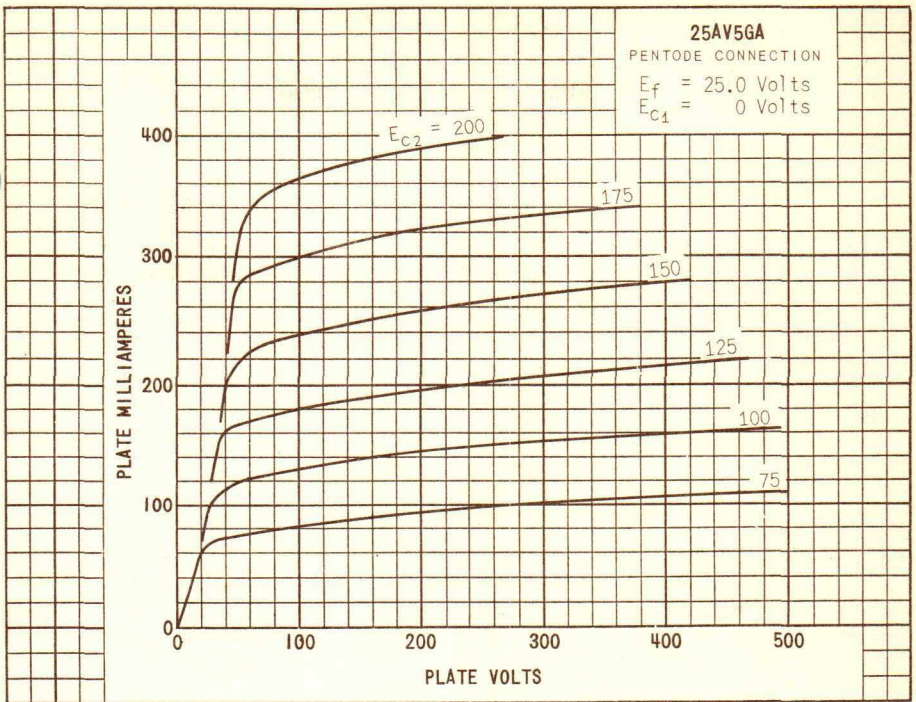
<sup>E</sup> APPLIED FOR VERY SHORT INTERVAL SO AS NOT TO DAMAGE TUBE.

<sup>F</sup> TRIODE CONNECTION (SCREEN TIED TO PLATE) WITH  $E_b = E_{c2} = 150$  VOLTS AND  $E_{c1} = -22.5$  VOLTS

SIMILAR TYPE REFERENCE: Except for heater characteristics, the 25AV5GA is identical to the 6AV5GA, 12AV5GA & the 17AV5GA.

→ INDICATES A CHANGE.





25AV5GA (6AV5GA)

