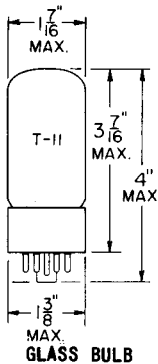


## TUNG-SOL

## PENTODE



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

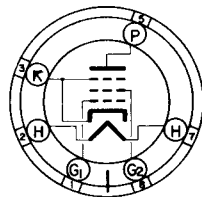
COATED UNIPOTENTIAL CATHODE

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	μμf
INPUT	14	μμf
OUTPUT	7.0	μμf

**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	MEG OHM
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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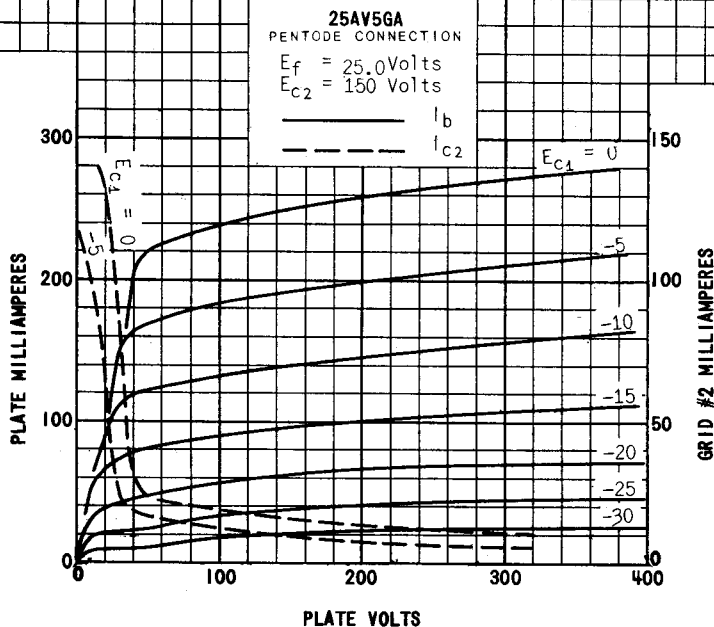
## TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

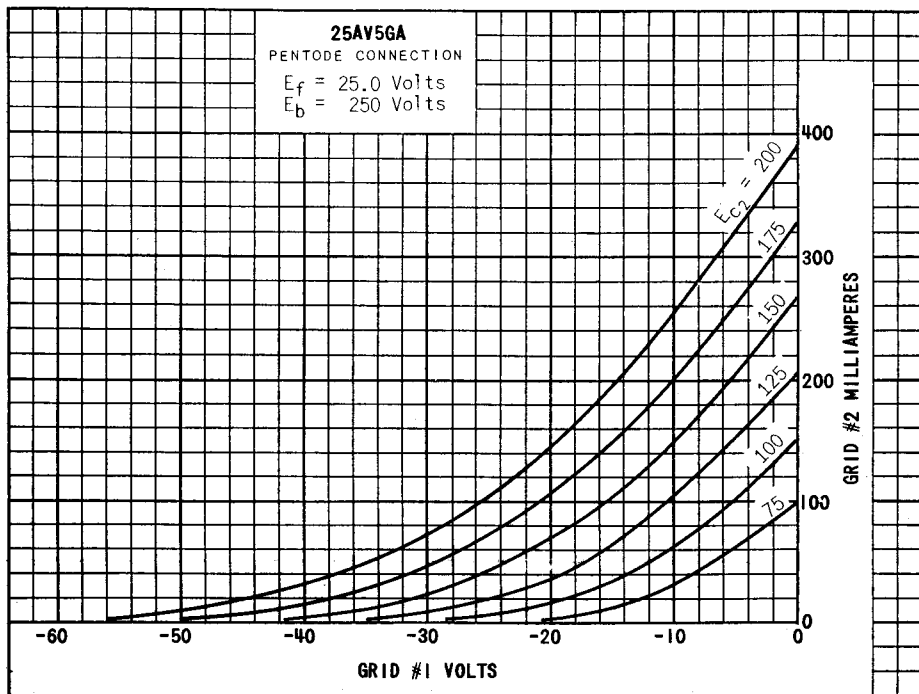
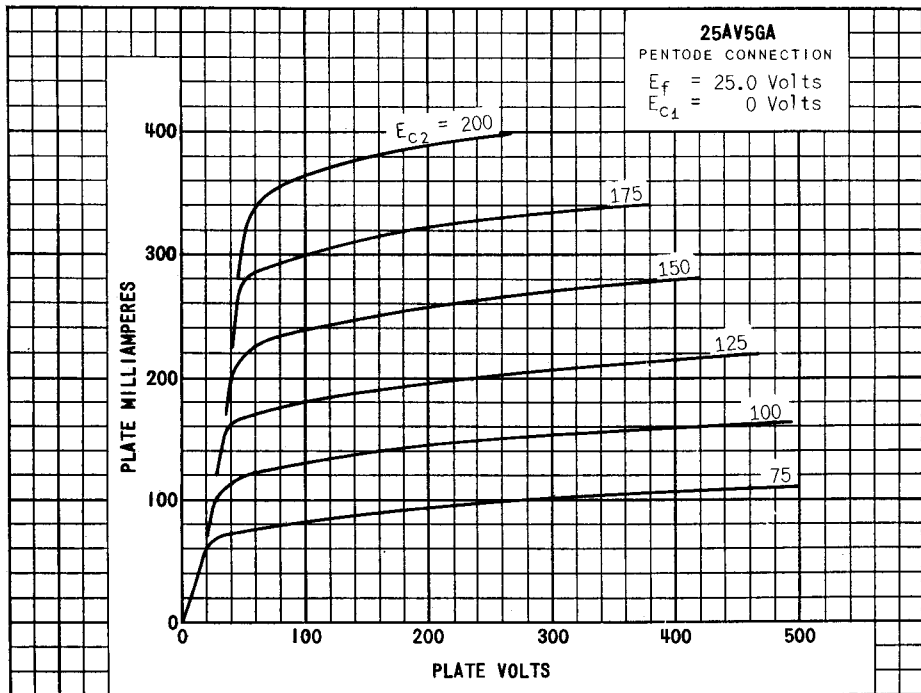
HEATER VOLTAGE	25.0		VOLTS
HEATER CURRENT	0.3		AMP.
PLATE VOLTAGE	60	250	VOLTS
GRID #2 VOLTAGE	150	150	VOLTS
GRID #1 VOLTAGE	0 <sup>E</sup>	-22.5	VOLTS
PLATE RESISTANCE (APPROX.)	---	14 500	← OHMS
TRANSCONDUCTANCE	---	5 900	← μMHOS
PLATE CURRENT	260	57	← MA.
GRID #2 CURRENT	26	2.1	← MA.
GRID #1 VOLTAGE (APPROX.)			
FOR $I_b = 1.0$ MA.	---	-43	← VOLTS
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)

## 25AV5GA

PENTODE CONNECTION

$E_f = 25.0$  Volts

$E_b = 250$  Volts

