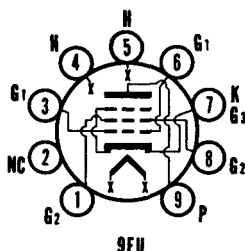


SYLVANIA TYPE 6GC5 BEAM POWER PENTODE



The 9T9 design utilizes a T-9 (1 $\frac{1}{8}$ " Dia.) bulb based to fit a standard 9-pin miniature socket. Advantages of the 9T9 include an increase in the heat dissipation safety margin, as compared to 9-pin miniature tubes employing T-6 $\frac{1}{2}$ (1 $\frac{1}{8}$ " Dia.) bulbs.

MECHANICAL DATA

Bulb.....	Special, T-9
Base.....	9-Pin, Same as E9-1, except Bulb Dia. (E9-68)
Outline.....	9-71
Basing.....	9EU
Cathode.....	Coated Unipotential
Mounting Position.....	Any

ELECTRICAL DATA

HEATER CHARACTERISTICS AND RATINGS

Characteristics

Heater Voltage ¹	6.3 Volts
Heater Current ²	1.2 Ma

Ratings (Design Maximum Values)

Heater Voltage ³	6.3 $\pm$ 0.6 Volts
Maximum Heater-Cathode Voltage	
Heater Negative with Respect to Cathode	
Total D C and Peak.....	200 Volts Max.
Heater Positive with Respect to Cathode	
D C.....	100 Volts Max.
Total D C and Peak.....	200 Volts Max.

DIRECT INTERELECTRODE CAPACITANCES (Approx.)

Grid No. 1 to Plate.....	0.9 μ f
Input: g1 to (h + k, g3 + g2).....	18 μ f
Output: p to (h + k, g3 + g2).....	7 μ f

RATINGS (Design Maximum Values)

Plate Voltage.....	220 Volts Max.
Grid No. 2 Voltage.....	140 Volts Max.
Plate Dissipation.....	12 Watts Max.
Grid No. 2 Dissipation.....	1.4 Watts Max.
Grid No. 1 Circuit Resistance	
Fixed Bias.....	0.1 Megohm Max.
Cathode Bias.....	0.5 Megohm Max.

CHARACTERISTICS AND TYPICAL OPERATIONS

Class A1 Amplifier (Single Tube)

Plate Voltage.....	110	200 Volts
Grid No. 2 Voltage.....	110	125 Volts
Grid No. 1 Voltage.....	-7.5	— Volts
Cathode Resistor.....	—	180 Ohms
Peak AF Grid No. 1 Voltage.....	7.5	8.5 Volts
Zero Signal Plate Current.....	49	46 Ma
Max. Signal Plate Current.....	50	47 Ma
Zero Signal Grid No. 2 Current.....	4	2.2 Ma
Max. Signal Grid No. 2 Current.....	10	8.5 Ma
Transconductance.....	8000	8000 μ mhos
Plate Resistance (approx.).....	13,000	28,000 Ohms
Load Resistance.....	2000	4000 Ohms
Max. Signal Power Output.....	2.1	3.8 Watts
Total Harmonic Distortion (approx.).....	10	10 Percent

NOTES:

- For parallel operation of heaters, equipment should be designed that at normal supply voltage bogey tubes will operate at this value of heater voltage.
- The bogey value of current is obtained when operating the heater at the specified 6.3 volts.
- Heater voltage supply variations shall be restricted to maintain heater voltage within the specified tolerance.

APPLICATION

The Sylvania Type 6GC5, beam power pentode, features high power sensitivity as an audio power amplifier. In Class A1 operation, it can deliver 2.1 watts of power with a B+ voltage of only 110 volts.