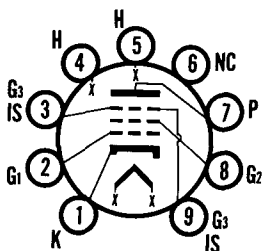




SYLVANIA TYPE 6GK6 BEAM POWER PENTODE



9GK

MECHANICAL DATA

Bulb.....	T-6 1/2
Base.....	E9-1, Miniature Button 9-Pin
Outline.....	6-4
Basing.....	9GK
Cathode.....	Coated Unipotential
Mounting Position.....	Any

ELECTRICAL DATA

HEATER CHARACTERISTICS AND RATINGS

Characteristics

Heater Voltage ¹	6.3 Volts
Heater Current ²	760 Ma

Ratings (Design Maximum Values)

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

DIRECT INTERELECTRODE CAPACITANCES

Grid No. 1 to Plate.....	0.14 μmf Max.
Input.....	10 μmf
Output.....	7 μmf

RATINGS (Design Maximum Values)

Plate Voltage ⁴	330 Volts Max.
Grid No. 2 Voltage ⁴	330 Volts Max.
Negative Grid No. 1 Voltage.....	100 Volts Max.
Plate Dissipation.....	13.2 Watts Max.
Grid No. 2 Dissipation (Average).....	2 Watts Max.
Grid No. 2 Dissipation (Peak).....	4 Watts Max.
Cathode Current.....	65 Ma Max.
Grid No. 1 Circuit Resistance	
Fixed Bias.....	0.3 Megohm Max.
Cathode Bias.....	1.0 Megohm Max.

CHARACTERISTICS AND TYPICAL OPERATION

Pentode Operation

Single Tube Class A1	Class AB1 Push-Pull
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Plate Voltage.....	250	300 Volts
Grid No. 2 Voltage.....	250	300 Volts
Grid No. 1 Voltage.....	-7.3	— Volts
Cathode Resistor.....	135	130 Ohms
Grid Voltage (RMS) Per Grid....	4.3	10 Volts
Plate Current (Zero Signal).....	48	72 Ma
Plate Current (Max. Signal).....	49.5	92 Ma
Grid No. 2 Current (Zero Signal).....	5.5	8 Ma
Grid No. 2 Current (Max. Signal).....	10.8	22 Ma
Transconductance.....	11.3K	— μmhos
Amplification Factor ⁵	19	—
Plate Resistance.....	38K	— Ohms
Load Resistance.....	5.2K	— Ohms
Load Resistance (Plate to Plate).....	—	8K Ohms
Maximum-Signal Power Output..	5.7	17 Watts
Total Harmonic Distortion.....	10	4.0 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.

SYLVANIA TYPE 6GK6 (Cont'd)

4. When the heater and positive voltages are obtained from a storage battery by means of a vibrator, the maximum values of the plate and Grid No. 2 Voltages are 275 volts and that of the plate dissipation 9.9 watts.
5. Measured from Grid No. 2 to Plate.

APPLICATION

The Sylvania Type 6GK6 is a beam power pentode audio Amplifier designed for service in the output stage of high quality audio amplifiers or other equipment requiring high power output at relative low distortion.