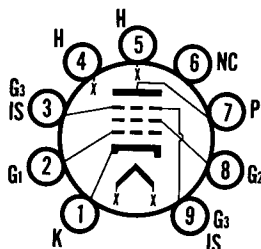


SYLVANIA TYPE 6GK6

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	
Plate Voltage.....	250	250	300 Volts
Grid No. 2 Voltage.....	250	250	300 Volts
Grid No. 1 Voltage.....	-7.3	—	— Volts
Cathode Resistor.....	135	130	130 Ohms
Grid Voltage (RMS) Per Grid....	4.3	8	10 Volts
Plate Current (Zero Signal).....	48	62	72 Ma
Plate Current (Max. Signal).....	49.5	75	92 Ma
Grid No. 2 Current (Zero Signal).....	5.5	7.0	8 Ma
Grid No. 2 Current (Max. Signal).....	10.8	15	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	8K Ohms
Maximum-Signal Power Output.....	5.7	11	17 Watts
Total Harmonic Distortion.....	10	3.0	4.0 Percent

NOTES:

1. For parallel operation of heaters, equipment should be designed that at normal supply voltage bogey tubes will operate at this value of heater voltage.
2. The bogey value of current is obtained when operating the heater at the specified 6.3 volts.
3. 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.