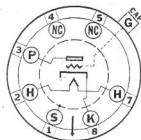


Sylvania
TYPE 6K5G
 HIGH-MU
 TRIODE



CHARACTERISTICS

Heater Voltage AC or DC	6.3 Volts
Heater Current	0.3 Ampere

Direct Interelectrode Capacitances:

Grid to Plate	2.0 μ f
Input	2.4 μ f
Output	3.6 μ f
Maximum Over-all Length	4 $\frac{1}{2}$ "
Maximum Diameter	1 $\frac{1}{8}$ "
Bulb	ST-12
Cap	Miniature
Base—Small Octal 7-Pin	5-U

Operating Conditions and Characteristics:

CLASS A AMPLIFIER

Heater Voltage	6.3	6.3 Volts
Plate Voltage	100	250 Volts
Grid Voltage*	-1.5	-3 Volts
Plate Current*	0.35	1.1 Ma.
Plate Resistance	78000	50000 Ohms (Approx.)
Mutual Conductance	900	1400 μ mhos (Approx.)
Amplification Factor	70	70

*These are rating values only and not operating points with coupling resistor. See "Circuit Application."

CIRCUIT APPLICATION

Sylvania 6K5G is a new high-mu triode glass tube equipped with an octal base. The characteristics of this amplifier are very similar to the triode section of Sylvania Type 6Q7G. The principal differences appear in the increased mutual conductance and corresponding reduction in plate impedance.

The amplification factor ($\mu=70$) is somewhat lower than that of the Type 6F5 or the triode section of Type 75, but this lower value enables the use of a larger signal input both under 250-volt and 100-volt operating conditions before the grid swing reaches the grid current region. This feature also renders the value of grid bias less critical than with a tube having a higher amplification factor.

This tube when operated with a plate supply voltage of 250 volts and a plate load resistor of 100,000 to 250,000 ohms should have a negative grid bias of approximately 2.5 volts. When the triode is operated on a plate supply of 100 volts with a plate load resistor of 50,000 to 100,000 ohms, the negative grid bias should be of the order of 1.4 volts. For special application these values may be varied to suit the conditions.