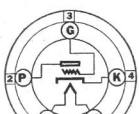

Sylvania

TYPE 37

GENERAL PURPOSE AMPLIFIER

CHARACTERISTICS

Heater Voltage	6.3 Volts
Heater Current	0.3 Ampere

Direct Interelectrode Capacitances:

Grid to Plate	2.0 $\mu\mu$f
Input	3.5 $\mu\mu$f
Output	2.9 $\mu\mu$f
Maximum Over-all Length	4¼"
Maximum Diameter	1⅛"
Bulb	ST-12
Base—Small 5-Pin	5-A

Operating Conditions and Characteristics:

Heater Voltage	6.3	6.3	6.3	6.3 Volts
Plate Voltage	90	135	180	250 Volts Max.
Grid Voltage	−6	−9	−13.5	−18 Volts
Plate Current	2.5	4.1	4.3	7.5 Ma.
Plate Resistance	11500	10000	10200	8400 Ohms
Mutual Conductance	800	925	900	1100 μmhos
Amplification Factor	9.2	9.2	9.2	9.2

CIRCUIT APPLICATION

Sylvania 37 is a general purpose triode having a 6.3 volt heater and may be used in circuits of conventional design as an amplifier, detector, oscillator or automatic volume control tube.

This tube employs an indirectly heated cathode of special design which permits a heater voltage range of from 5.5 to 8.5 volts without appreciably affecting the performance or serviceability of the tube. No resistor in the heater circuit is required for this type operated from a 6 volt battery.

The 37 may be used as either type of detector. If grid leak detection is used, a condenser of .00025 μf and a grid leak of from 1 to 5 megohms will give excellent sensitivity. However, more stable operation and better quality will be obtained by using a low value of grid leak.

For plate detection the bias may be secured either from a fixed voltage source or by automatic biasing from a resistor in the cathode circuit.