

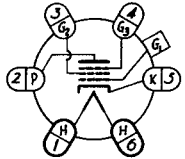


PENTODE
DETECTOR OR AMPLIFIER
Heater Type Glass Bulb

The 57 is a pentode type amplifier tube designed for service as a detector or high frequency amplifier in a-c operated receivers.

RATINGS

Heater Voltage (a-c or d-c)	2.5 volts
Heater Current	1.0 amp
Maximum Plate Voltage	250 volts
Maximum Screen Voltage	100 volts



BOTTOM VIEW OF SOCKET

DIRECT INTERELECTRODE CAPACITANCES

	Pentode Connection
Grid to Plate	0.007 max.*
Input	5.0
Output	6.5

	Triode Connection†
	2.0 μf
	3.0 μf
	10.5 μf

AMPLIFIER - CLASS A

	Pentode Connection	Triode Connection†
Plate Voltage	100 250	250 volts
Screen Voltage	100 100	volts
Grid Bias	-3 -3	-8 volts
Suppressor	Connected to Cathode at Socket	
Amplification Factor	1185 1500 min.	20 approx.
Plate Resistance	1 1.5 min.	0.0105 megohm
Transconductance	1185 1225	1900 μmhos
Plate Current	2 2	6.5 ma
Screen Current	0.5 0.5	ma
Grid Bias (approximate)	-7 -7	volts

(For cathode current cutoff)

DETECTOR - BIASED TYPE

Plate Supply Voltage	100 100 250 250	volts
Screen Voltage	12 30 50 100	volts
Grid Bias	-1.16 -1.83 -1.95 -4.3	volts
Cathode Resistor	18000 10000 3000 10000	volts
Suppressor	Connected to Cathode at Socket	
Cathode Current (no sig.)	0.063 0.183 0.65 0.43	ma
Plate Resistor	1.0 0.25 0.25 0.5	megohm
Blocking Condenser	0.01 0.01 0.03 0.03	μf
Grid Resistor (for following tube)	1.0 0.5 0.25 0.25	megohm
R-F Signal Voltage (RMS)	1.05 1.6 1.18 1.37	volts
Output Peak Voltage	17 17 17 17	volts

(At grid of following tube with signal modulated 20%)

The voltage between heater and cathode should be kept as low as possible where they are not directly connected.

The shield in the dome of the tube is connected internally to the cathode.

*With tube shield

†Grids #2 and #3 connected to plate

For characteristic curves refer to the type 6J7G. The characteristics of the 57 are the same as those of the 6J7G except for the heater rating.