

PENTODE
DETECTOR OR AMPLIFIER
Heater Type Glass Bulb

The 77 is a pentode type amplifier tube designed for service as a detector or high frequency amplifier in storage battery or a-c operated receivers.

RATINGS

Heater Voltage (a-o or d-o)	6.3	volts
Heater Current	0.3	amp
Max. Plate Voltage	250	volts
Max. Screen Voltage	100	volts

DIRECT INTERELECTRODE CAPACITANCES

Grid to Plate	0.007 max.*	μf
Input	4.0	μf
Output	11	μf

AMPLIFIER - CLASS A

Plate Voltage	100	250	volts
Screen Voltage	60	100	volts
Grid Bias	-1.5	-3	volts
Suppressor	Connected to Cathode at Socket		
Amplification Factor	715	1500	
Plate Resistance (approx.)	0.65	1.5	megohms
Transconductance	1100	1250	μmhos
Plate Current	1.7	2.3	ma
Screen Current	0.4	0.6	ma
Grid Bias (approx.)	-5.5	-7.5	volts

(For cathode current cutoff)

DETECTOR - BIASED TYPE

Plate Supply Voltage	100	250	250	volts
Screen Voltage	36	50	100	volts
Grid Bias	-1.95	-1.95	-4.3	volts
Cathode Resistor	12500	3000	10000	ohms
Suppressor	Connected to Cathode at Socket			
Cathode Current (no signal)	0.155	0.65	0.43	ma
Plate Resistor	0.25	0.25	0.5	megohm
Blocking Condenser	0.01	0.03	0.03	μf
Grid Resistor (for following tube)	0.25	0.25	0.25	megohm
R-F Signal Voltage (RMS)	1.88	1.18	1.37	volts
Output Peak Voltage	14	17	17	volts

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

When a resistor is used in the grid circuit, its value should not exceed 1 megohm.

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

The internal shield is connected to the screen grid within the tube.

*With tube shield

