

PENTODE
DETECTOR OR AMPLIFIER
Heater Type Glass Bulb

The 6C6 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-c or d-c)	6.3 volts
Heater Current	0.3 amp
Maximum Plate Voltage	250 volts
Maximum Screen Voltage	100 volts

DIRECT INTERELECTRODE CAPACITANCES

	Pentode Connection	Triode Connection†
Grid to Plate	0.007 max.*	2.0 μmf
Input	5.0	3.0 μmf
Output	6.5	10.5 μmf

AMPLIFIER - CLASS A

	Pentode Connection	Triode Connection†
Plate Voltage	100 250	250 volts
Screen Voltage	100 100	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	ohms
Suppressor	Connected to Cathode at Socket				
Cathode Current (no signal)	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 shield in the dome of the tube is connected internally to the cathode. The voltage between heater and cathode should be kept as low as possible where they are not directly connected.

*With tube shield.
†Grids #2 and #3 connected to plate.

