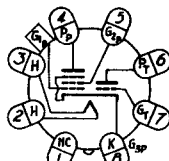


TRIODE-PENTODE
AMPLIFIER OR CONVERTER
Heater Type Glass Bulb

The 6P7G is a duplex tube, combining in one bulb a triode and a remote cutoff pentode, designed for service as an oscillator and mixer or as a high frequency amplifier and second detector, in storage battery or a-c operated receivers. The ratings and electrical characteristics are identical with those of the type 6P7.



BOTTOM VIEW OF SOCKET

RATINGS

Heater Voltage (a-c or d-c)	6.3	volts
Heater Current	0.3	amps

DIRECT INTERELECTRODE CAPACITANCES

	Grid to Plate	Input	Output	
Triode Section *	2.0	3.5	3.0	μuf
Pentode Section*	0.008 max.	3.5	12	μuf

AMPLIFIER - CLASS A

	Triode Section	Pentode Section	
Plate Voltage	100 max.	100	250 max. volts
Screen Voltage		100	100 max. volts
Grid Bias	-3	-3	-3 min. volts
Amplification Factor	8	300	900
Plate Resistance	0.016	0.29	0.85 megohm
Transconductance	500	1050	1100 μ mhos
Plate Current	3.5	6.3	6.5 ma
Screen Current		1.6	1.5 ma
Transconductance (at -35 volts bias)		9	10 μ mhos

FREQUENCY CONVERTER

	Triode Section	Pentode Section	
Maximum Plate Voltage	100	250	volts
Maximum Screen Voltage		100	volts
Minimum Grid Bias	†	-3 #	volts
Maximum Oscillator Plate Current (average)	4		ma
Typical Operation:			
Plate Voltage	100†	250	volts
Screen Voltage		100	volts
Grid Bias	†	-10 Δ	volts
Plate Resistance		2	megohm
Conversion Conductance		300	μmhos
Plate Current	2.4	2.8	ma
Grid Current	0.15	0	ma
Screen Current		0.6	ma
Oscillator Peak Voltage Input		7	volts

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

*With tube shield connected to cathode and other section connected to ground.
†Usually obtained by means of a grid leak.

#Grid bias should be at least 3 volts greater than the peak oscillator voltage applied to the pentode grid.

May be obtained from 250 volt supply through 60000 ohm series resistor.

AObtained by means of 1700 ohm cathode resistor.

For additional curves refer to the type 6F7.

