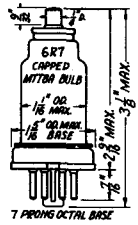
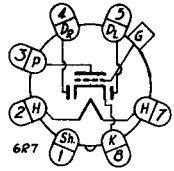
RAYTHEON

6R7
6R7G



DUO-DIODE TRIODE
DETECTOR AMPLIFIER
Heater Type
Metal Bulb-6R7 Glass Bulb-6R7G

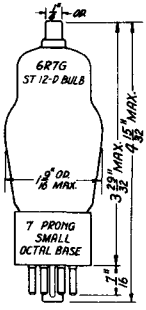


BOTTOM VIEW OF SOCKET
6R7G-NO CONNECTION
TO #1 PIN

The 6R7 is a duo-diode triode type amplifier tube designed for service as a combined diode detector, AVC rectifier and audio 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



DIRECT INTERELECTRODE CAPACITANCES - TRIODE SECTION

	Grid to Plate	Input	Output	
6R7*	2.5	5.5	4.0	μμf
6R7G	3.5	2.5	4.5	μμf

AMPLIFIER - CLASS A - TRIODE SECTION

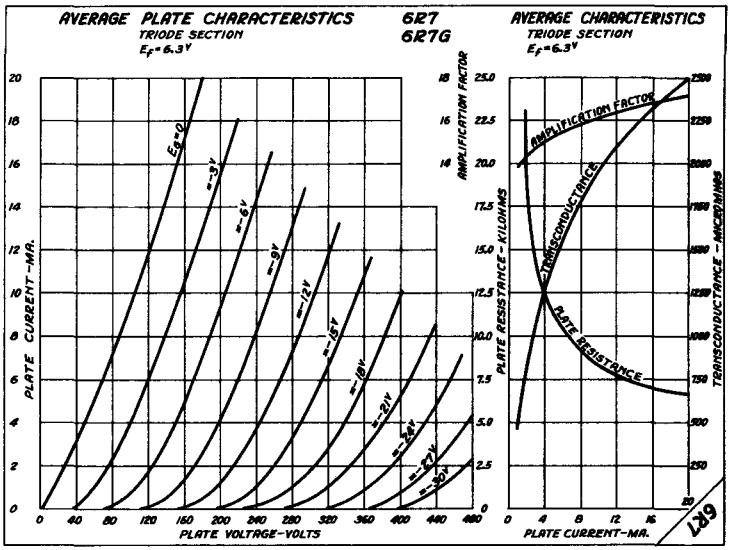
Plate Voltage	250	volts
Grid Bias	-9	volts
Amplification Factor	16	
Plate Resistance	8500	ohms
Transconductance	1900	μmhos
Plate Current	9.5	ma
Load Resistance	10000	ohms
Power Output (5% second harmonic)	280	mw

AMPLIFIER - CLASS A - RESISTANCE COUPLED - TRIODE SECTION

Plate Supply Voltage	250	volts
Grid Bias (approximate)	-6	volts
Plate Resistor	0.05 to 0.1	megohm
Plate Current	2.4 to 1.3	ma
Grid Resistor‡	0.5	megohm
Voltage Amplification	12	
Voltage Output (RMS)‡	51	volts

DIODE SECTION

The two diode units are independent of each other and of the triode section except for the common cathode. The diode may be used as a half wave or as a full wave rectifier; or one diode may be used as a half wave rectifier for detection, and the other diode used as a rectifier to obtain delayed AVC voltage.

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

*With shell connected to cathode.
‡For following tube.