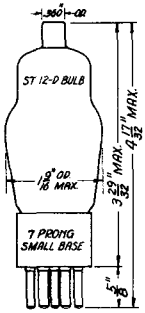
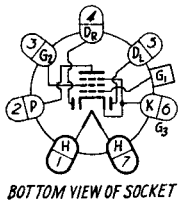


DUO-DIODE PENTODE
DETECTOR AMPLIFIER
Heater Type Glass Bulb



The 6B7 is a duo-diode pentode type amplifier tube designed for service as a combined diode detector, AVC rectifier, and high or 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
Maximum Screen Voltage	125	volts

DIRECT INTERELECTRODE CAPACITANCES - PENTODE SECTION

Grid to Plate	0.007 max.*	µµf
Input	3.5	µµf
Output	9.5	µµf

AMPLIFIER - CLASS A - PENTODE SECTION

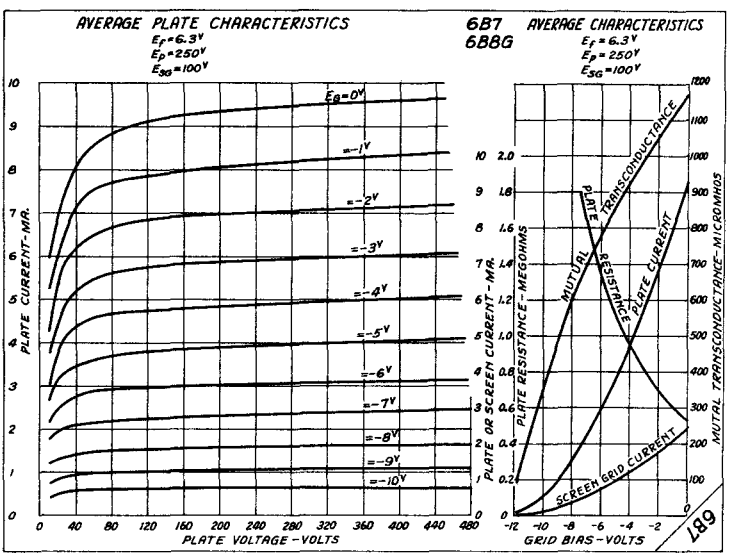
Plate Voltage	100	180	250	250	volts
Screen Voltage	100	75	100	125	volts
Grid Bias	-3	-3	-3	-3	volts
Amplification Factor	285	840	800	730	
Plate Resistance	0.3	1	0.8	0.65	megohm
Transconductance	950	840	1000	1125	µmhos
Plate Current	5.8	3.4	6	9	ma
Screen Current	1.7	0.9	1.5	2.3	ma
Grid Bias (For cathode current cutoff)	-17	-13	-17	-21	volts

AMPLIFIER - CLASS A - RESISTANCE COUPLED - PENTODE SECTION

Plate Supply Voltage	250	250	250	volts
Screen Voltage	45	50	100	volts
Grid Bias	-5	-4.5	-3	volts
Plate Resistor	0.5	0.25	0.027	megohm
Plate Current	0.25	0.65	5.4	ma

DIODE SECTION

The two diode units are independent of each other and of the pentode section except for the common cathode. The diodes 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 tube shield.