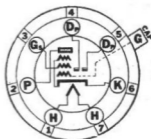


Sylvania

TYPE 2B7

DUODIODE

HIGH GAIN PENTODE



CHARACTERISTICS

Heater Voltage AC or DC	2.5 Volts
Heater Current	0.8 Ampere

Direct Interelectrode Capacitances:

Grid to Plate (with tube shield)	0.007 $\mu\mu\text{f}$
Input	3.5 $\mu\mu\text{f}$
Output	9.5 $\mu\mu\text{f}$
Maximum Over-all Length	4 $\frac{1}{2}$ "
Maximum Diameter	1 $\frac{1}{8}$ "
Bulb	ST-12
Cap	Small Metal
Base—Small 7-Pin	7-D

Operating Conditions and Characteristics:

DIODE UNITS

With an applied d-c plate voltage of 10 volts the space current per plate (no external load) should exceed 0.5 milliampere.

PENTODE UNIT CLASS A AMPLIFIER

Heater Voltage	2.5	2.5	2.5	2.5 Volts
Plate Voltage	100	180	250	250 Volts Max.
Screen Voltage	100	75	100	125 Volts Max.
Grid Voltage	-3	-3	-3	-3 Volts
Plate Current	5.8	3.4	6.0	9.0 Ma.
Screen Current	1.7	0.9	1.5	2.3 Ma.
Grid Bias Voltage*	-17	-13	-17	-21 Volts
Plate Resistance	0.3	1.0	0.8	0.65 Megohm
Mutual Conductance	950	840	1000	1125 μmhos
Amplification Factor	285	840	800	730

*For Cathode Current Cut-off.

CIRCUIT APPLICATION

Sylvania 2B7 is a duodiode pentode similar in design and characteristics to Type 6B7 of the 6.3 volt group except for heater rating. The 2B7 draws 0.8 ampere at 2.5 volts. The 2B7 can be used simultaneously as a detector, amplifier, and automatic volume control tube in a-c operated receivers.

Complete circuit application details for the 2B7 will be found under Type 6B7.