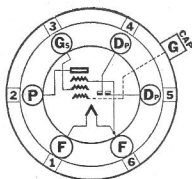


Sylvania

TYPE 1F6

DUODIODE

PENTODE



CHARACTERISTICS

Filament Voltage	2.0 Volts
Filament Current	0.06 Ampere

Direct Interelectrode Capacitances—Pentode Unit:

Grid to Plate (With Tube Shield)	0.007 μf Max.
Input	4 μf
Output	9 μf
Maximum Over-all Length	4 $\frac{1}{2}$ "
Maximum Diameter	1 $\frac{3}{16}$ "
Bulb	ST-12
Cap	Small Metal
Base—Small 6-Pin	6-W

Operating Conditions and Characteristics:

PENTODE UNIT: R-F OR I-F AMPLIFIER

Filament Voltage	2.0 Volts
Plate Voltage	180 Volts
Screen Voltage	67.5 Volts
Grid Voltage	-1.5 Volts
Plate Current	2.0 Ma.
Screen Current	0.6 Ma.
Plate Resistance (Approx.)	1 Megohm
Amplification Factor (Approx.)	650
Mutual Conductance	650 μmhos
Mutual Conductance (at -12 Volts Bias)	15 μmhos

PENTODE UNIT: A-F AMPLIFIER (RESISTANCE COUPLED)

Plate Supply Voltage	135	135	135	Volts			
Screen Supply Voltage	135	135	135	Volts			
Plate Resistor	0.25	0.25	0.25	Megohm			
Screen Resistor	1.0	0.9	0.8	Megohm			
D-C Grid Voltage	-1.0	-1.5	-2.0	Volts			
Peak A-F Grid Voltage	0.64	0.63	0.62	Volts			
Plate Current (Esig = 0)	0.42	0.42	0.42	Ma.			
Plate Current (Esig = Max.)	0.34	0.34	0.34	Ma.			
Load Resistance	See Circuit Application						
Grid Resistor*	1.0	0.5	1.0	0.5	1.0	0.5	Megohm
Voltage Output† (Peak)	30.8	28	29.4	26.6	28	25.2	Volts
Harmonic Distortion Total	5	5	5	5	5	5	Per Cent
Voltage Amplification	48	43	47	42	46	41	

*For following tube.

†Across load resistance.

CIRCUIT APPLICATION

Sylvania 1F6 is a duodiode pentode suitable for use in 2-volt battery receivers. This tube will find wide application as a combined diode detector and pentode amplifier, and for securing the required voltage for a.v.c. Conventional circuits for a pentode are applicable to the pentode section of Type 1F6 when employed as an r-f or i-f amplifier. As an a-f amplifier the pentode unit may be used in a resistance coupled circuit to provide high gain. The load resistance includes the plate resistor, coupling condenser, and grid resistor of the following tube. Detailed data for this service are given in ratings shown above.