

Sylvania

TYPE 10

POWER AMPLIFIER



CHARACTERISTICS

Filament Voltage	7.5 Volts
Filament Current	1.25 Amperes

Direct Interelectrode Capacitances:

Grid to Plate	7 $\mu\mu\text{f}$
Input	4 $\mu\mu\text{f}$
Output	3 $\mu\mu\text{f}$
Maximum Over-all Length	5 $\frac{3}{8}$ "
Maximum Diameter	2 $\frac{1}{8}$ "
Bulb	ST-16
Base—Medium 4-Pin	4-D

Operating Conditions and Characteristics:

Filament Voltage	7.5	7.5	7.5 Volts
Plate Voltage	250	350	425 Volts
Grid Voltage*	-23.5	-32	-40 Volts
Plate Current	10	16	18 Ma.
Plate Resistance	6000	5150	5000 Ohms
Mutual Conductance	1330	1550	1600 μmhos
Amplification Factor	8	8	8
Load Resistance	13000	11000	10200 Ohms
Power Output	0.4	0.9	1.6 Watts

*Grid volts measured from mid-point of a-c operated filament.

CIRCUIT APPLICATION

Sylvania 10 is a triode power amplifier having an amplification factor of 8. This is considerably higher than normal for power amplifier triodes, and accounts for its popularity as an oscillator.

This tube should be operated with plate voltages of at least 250 volts and appropriate grid bias. Type 10 may be employed in audio stages, either singly or in push-pull arrangement as a Class A or Class B amplifier. Under the latter condition the tubes should be biased so that the no signal plate current is reduced to a low value.

As an oscillator tube Type 10 is used extensively in transmitters and in other similar equipment.