

Sylvania

TYPE 25A6

POWER AMPLIFIER

PENTODE



CHARACTERISTICS

Heater Voltage AC or DC	25.0 Volts
Heater Current	0.3 Ampere
Maximum Over-all Length	3 1/4"
Maximum Diameter	1 1/8"
Base—Small Octal 7-Pin	7-S

Operating Conditions and Characteristics:

Heater Voltage AC or DC	25.0	25.0	25.0 Volts
Plate Voltage	95	135	180 Max. Volts
Screen Voltage	95	135 Max.	135 Max. Volts
Grid Voltage	-15	-20	-20 Volts
Plate Current	20	37	38 Ma.
Screen Current	4	8	7.5 Ma.
Plate Resistance†	45000	35000	40000 Ohms
Amplification Factor†	90	85	100
Mutual Conductance	2000	2450	2500 μmhos
Load Resistance	4500	4000	5000 Ohms
Self-Bias Resistor	625	450	450 Ohms
Power Output	0.9	2	2.75 Watts
Total Harmonic Distortion	11	9	10 Per Cent

†Approximate Values.

CIRCUIT APPLICATION

The Sylvania Type 25A6 is the metal tube equivalent of the Type 43 and can be used in the same circuit applications.

The use of the 25A6 as an output tube will reduce the hum and line interference noise usually present in a d-c line operated receiver employing filament type pentodes. The tubes may be operated either singly or in push-pull Class A, in which case no power is required from the driver stage. Any tube which will deliver sufficient voltage to the grids may be used as the intermediate audio amplifier. As with other push-pull combinations, the load resistance per tube may be decreased somewhat thereby reducing the third harmonic, while the second will cancel due to the push-pull circuit.

In cases where resistance coupling is employed for Type 25A6, the grid resistor value should not exceed 250,000 ohms.

Since the 25A6 will be used in a series filament circuit with other tubes, a high positive voltage may be impressed between the heater and cathode. This voltage may cause leakage currents which may be detrimental in some applications, and care should be taken in laying out the circuit to prevent difficulties arising from this source.