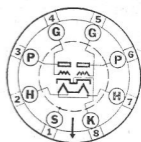


Sylvania

# TYPE 6N7

CLASS B

POWER AMPLIFIER



## CHARACTERISTICS

Heater Voltage AC or DC . . . . .	6.3 Volts
Heater Current . . . . .	0.8 Ampere
Maximum Over-all Length . . . . .	3 1/4"
Maximum Diameter . . . . .	1 1/8"
Base—Small Octal 8-Pin . . . . .	8-B

### Operating Conditions and Characteristics:

#### CLASS B POWER AMPLIFIER

Heater Voltage . . . . .	6.3 Volts
Plate Voltage . . . . .	300 Volts
Dynamic Peak Plate Current (per Plate) . . . . .	125 Ma.
Average Plate Dissipation . . . . .	10 Watts

#### Typical Operation:

Plate Voltage . . . . .	250	300 Volts
Grid Voltage . . . . .	0	/ 0 Volts
Static Plate Current (per Plate) . . . . .	14	17.5 Ma.
Load Resistance (Plate-to-Plate) . . . . .	8000	10000 Ohms
Power Output* . . . . .	8	10 Watts

\*With average input of 350 milliwatts applied between grids.

#### CLASS A DRIVER

(Both grids and both plates connected together at the socket).

Heater Voltage . . . . .	6.3	6.3 Volts
Plate Voltage . . . . .	250	294 Volts
Grid Voltage . . . . .	-5	-6 Volts
Plate Current . . . . .	6	7 Ma.
Plate Resistance . . . . .	11300	11000 Ohms
Mutual Conductance . . . . .	3100	3200 $\mu$ mhos
Amplification Factor . . . . .	35	35

## CIRCUIT APPLICATION

Sylvania Type 6N7 is the metal tube equivalent of Type 6A6. It is a heater type Class B output tube, consisting of two triode units in a single bulb.

Type 6N7 is used primarily as a Class B output tube in a-c operated receivers, and will also find application in automobile receivers properly designed for its characteristics.

By connecting the triode elements in parallel, Type 6N7 may be employed as a Class A tube, supplying sufficient power to drive another 6N7 in a Class B output stage. The driver plate load should be two to four times the plate resistance, the value depending upon the design of the Class B stage. The maximum d-c resistance in the grid circuit should not exceed 0.5 megohm, when the tube is self-biased. With fixed bias the value should be limited to 0.1 megohm.

Other special applications, such as its use as a cascade amplifier or combination voltage amplifier and phase inverter, are similar to those applying to Type 6A6 and reference may be made to the notes on page 35.