

Sylvania

TYPE 6A8

PENTAGRID

CONVERTER



CHARACTERISTICS

Heater Voltage AC or DC	6.3 Volts
Heater Current	0.3 Ampere

Direct Interelectrode Capacitances:

Grid G to Plate	0.03 $\mu\mu\text{f}$
Grid G to Grid Ga	0.1 $\mu\mu\text{f}$
Grid G to Grid Go	0.09 $\mu\mu\text{f}$
Grid Go to Grid Ga	0.8 $\mu\mu\text{f}$
Grid G to all other Electrodes (R-F Input)	12.5 $\mu\mu\text{f}$
Grid Ga to all other Electrodes (Osc. Output)	5.0 $\mu\mu\text{f}$
Grid Go to all other Electrodes (Osc. Input)	6.5 $\mu\mu\text{f}$
Plate to all other Electrodes (Mixer Output)	12.5 $\mu\mu\text{f}$

Maximum Over-all Length	3 1/8"
Maximum Diameter	1 5/8"
Cap	Miniature
Base—Small Octal 8-Pin	8-A

Operating Conditions and Characteristics:

Heater Voltage	6.3	6.3 Volts
Plate Voltage	100	250 Volts Max.
Control Grid Voltage (G)	-1.5	-3 Volts Min.
Screen Voltage (Gs)	50	100 Volts Max.
Anode Grid Voltage (Ga)	100*	250* Volts
Oscillator Grid Resistor (Go)	50000	50000 Ohms
Plate Current	1.2	3.0 Ma.
Screen Grid Current	1.5	3.2 Ma.
Anode Grid Current	1.6	4.0 Ma.
Oscillator Grid Current	0.25	0.5 Ma.
Cathode Resistor	300	300 Ohms
Plate Resistance	0.8	0.5 Megohm
Conversion Conductance	350	500 μmhos
Control Grid Voltage for 2 μmhos Conv. Cond.	-20	-45 Volts Approx.

*Anode grid supply voltage with 20,000 ohms in series with Ga.

CIRCUIT APPLICATION

Sylvania 6A8 is an electron-coupled pentagrid converter tube of the metal type construction. It is designed for the same service as the glass Type 6A7 and has characteristics which closely parallel those of that tube. The principal differences appear in the values of some of the interelectrode capacitances.

Under Types 6A7 and 2A7 there appear detailed circuit application notes on the use of these combined mixer and oscillator tubes. Refer to those notes in conjunction with Type 6A8 applications.