

Sylvania

# TYPE 6D8G

## PENTAGRID CONVERTER



### TENTATIVE CHARACTERISTICS

Heater Voltage AC or DC . . . . .	6.3 Volts
Heater Current . . . . .	0.150 Ampere

#### Direct Interelectrode Capacitances:

Grid G to Plate (with tube shield) . . . . .	0.30 $\mu\mu\text{f}$
Grid G to Grid GA (with tube shield) . . . . .	0.20 $\mu\mu\text{f}$
Grid G to Grid Go (with tube shield) . . . . .	0.15 $\mu\mu\text{f}$
Grid Go to Grid GA . . . . .	1.0 $\mu\mu\text{f}$
Grid G to all other Electrodes (R-F Input) . . . . .	7.0 $\mu\mu\text{f}$
Grid GA to all other Electrodes (Osc. Output) . . . . .	6.0 $\mu\mu\text{f}$
Grid Go to all other Electrodes (Osc. Input) . . . . .	7.0 $\mu\mu\text{f}$
Plate to all other Electrodes (Mixer Output) . . . . .	9.0 $\mu\mu\text{f}$
Maximum Over-all Length . . . . .	4 $\frac{3}{4}$ "
Maximum Diameter . . . . .	1 $\frac{1}{16}$ "
Bulb . . . . .	ST-12
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
Control Grid Voltage (G) . . . . .	-1.5	-3.0 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 . . . . .	1.0	3.0 Ma.
Screen Grid Current . . . . .	1.7	3.5 Ma.
Anode Grid Current . . . . .	1.8	4.5 Ma.
Oscillator Grid Current . . . . .	0.25	0.7 Ma.
Cathode Resistor . . . . .	300	300 Ohms
Plate Resistance . . . . .	0.55	0.32 Megohm
Conversion Conductance . . . . .	300	500 $\mu\text{mhos}$
Control Grid Voltage for 2 $\mu\text{mhos}$ Conversion Conductance . . . . .	-20	-40 Volts (Approx.)

†Maximum.

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

### CIRCUIT APPLICATION

Sylvania 6D8G is a new pentagrid converter tube with characteristics very similar to those for Types 6A7 and 6A8G. The principal difference in ratings appears in the heater current which for Type 6D8G is only 0.150 ampere.

The uses for this tube parallel those for the other 6.3 volt tubes having this construction. Reference may be made to the circuit application notes for Type 6A7 on Page 36.