

# Hygrade Sylvania

CORPORATION

## TECHNICAL DATA

### SYLVANIA TYPE 6D8G

#### Pentagrid Converter

#### TENTATIVE RATINGS AND 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	μμF.
Grid G to Grid G <sub>a</sub> (with tube shield)	0.20	μμF.
Grid G to Grid G <sub>o</sub> (with tube shield)	0.15	μμF.
Grid G <sub>o</sub> to Grid G <sub>a</sub>	1.0	μμF.
Grid G to all other electrodes (r-f input)	7.0	μμF.
Grid G <sub>a</sub> to all other electrodes (Osc. Output)	6.0	μμF.
Grid G <sub>o</sub> to all other electrodes (Osc. Input)	7.0	μμF.
Plate to all other electrodes (Mixer Output)	9.0	μμF.

#### 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 (G <sub>s</sub> )	50	100	Volts Max.
Anode Grid Voltage (G <sub>a</sub> )	100*	250*	Volts
Oscillator Grid Resistor (G <sub>o</sub> )	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	μmhos
Control Grid Voltage for 2 μmhos Conversion Conductance	-20	-40	Volts (Approx)

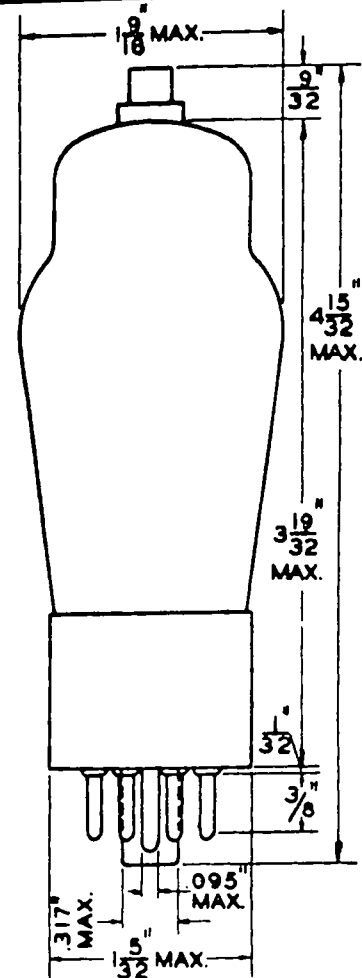
° Maximum

\* Anode grid supply voltage with 20,000 ohms in series with G<sub>a</sub>.

#### 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. The circuit applications are well known and do not require repetition in this bulletin.



TUBE AND BASE DIAGRAM  
(BOTTOM VIEW)

