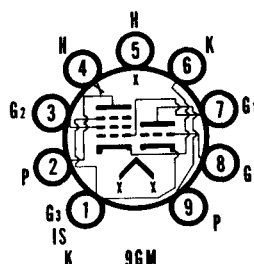




SYLVANIA TYPE 6CU8 **MEDIUM MU TRIODE** **SHARP CUTOFF PENTODE**



MECHANICAL DATA

Bulb.....	T-6½
Base.....	E9-1, Small Button 9-Pin
Outline.....	6-2
Basing.....	9GM
Cathode.....	Coated Unipotential
Mounting Position.....	Any

ELECTRICAL DATA

HEATER CHARACTERISTICS

Heater Voltage.....	6.3 Volts
Heater Current.....	450 Ma
Heater Warm-up Time¹.....	11 Seconds
Heater-Cathode Voltage (Design Center Values)	
Heater Negative with Respect to Cathode	
Total D C and Peak.....	200 Volts Max.
Heater Positive with Respect to Cathode	
D C.....	100 Volts Max.
Total D C and Peak.....	200 Volts Max.

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

Triode Section

Grid to Plate.....	1.6 $\mu\mu\text{f}$
Grid to (k+h+g3+l.S.).....	1.9 $\mu\mu\text{f}$
Plate to (k+h+g3+l.S.).....	1.6 $\mu\mu\text{f}$

Pentode Section

Grid No. 1 to Plate.....	0.025 $\mu\mu\text{f}$ Max.
Grid No. 1 to (k and g3+g2+h+Tk+l.S.).....	7.0 $\mu\mu\text{f}$
Plate to (k and g3+g2+h+Tk+l.S.).....	2.4 $\mu\mu\text{f}$

6CU8 (Cont'd)

DIRECT INTERELECTRODE CAPACITANCES (Cont'd)

Coupling

Pentode Grid No. 1 to Triode Plate.....	0.02 $\mu\mu\text{f}$
Pentode Plate to Triode Plate.....	0.04 $\mu\mu\text{f}$
Triode Grid to Pentode Plate.....	0.005 $\mu\mu\text{f}$

MAXIMUM RATINGS (Design Center Values)

	Triode Section	Pentode Section
Plate Voltage.....	300	300 Volts
Grid No. 2 Supply Voltage.....		300 Volts
Grid No. 2 Voltage.....	See 6AM8 Rating Chart	
Plate Dissipation.....	2.6	2 Watts
Positive Grid No. 1 Voltage.....	0	0 Volt
Grid No. 2 Input:		
For Grid No. 2 Voltages up to 150 Volts....		0.5 Watt
For Grid No. 2 Voltages Between 150 Volts and 300 Volts.....	See 6AM8 Rating Chart	
Grid No. 1 Circuit Resistance		
Fixed Bias.....	0.5	0.25 Megohm
Self Bias.....	1.0	1.0 Megohm

AVERAGE CHARACTERISTICS

	Triode Section	Pentode Section
Plate Voltage.....	200	200 Volts
Grid No. 2 Voltage.....		150 Volts
Grid Voltage.....	-6	Volts
Cathode Bias Resistor.....		180 Ohms
Plate Current.....	13	9.5 Ma
Grid No. 2 Current.....		2.0 Ma
Transconductance.....	3300	6200 μmhos
Amplification Factor.....	19	
Plate Resistance.....	5750	300,000 Ohms
E_{c1} for $I_b = 10 \mu\text{a}$ (approx.).....	-19	-8 Volts

NOTE:

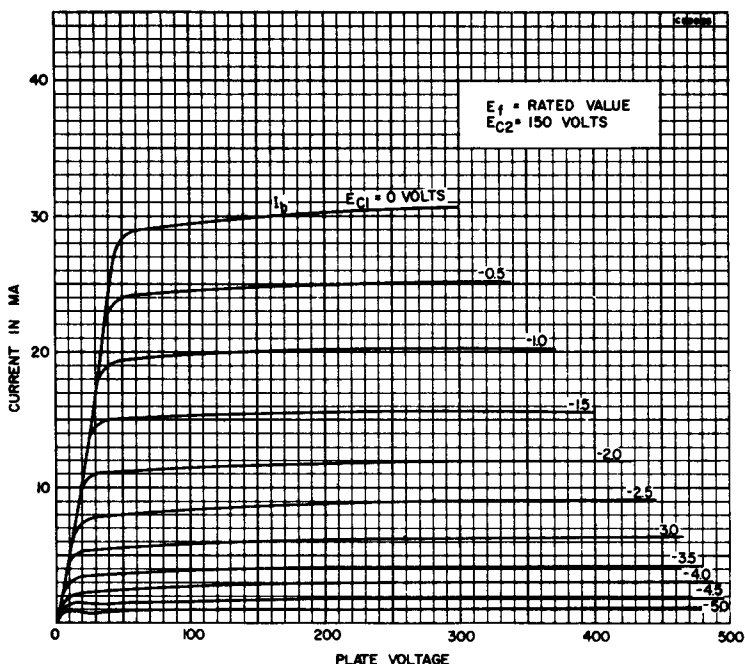
1. Heater warm-up time is defined as the time required for the voltage across the heater to reach 80% of its rated value after applying four (4) times rated heater voltage to a circuit consisting of the tube heater in series with a resistance equal to three (3) times rated heater voltage divided by rated heater current.

APPLICATION

The Sylvania Type 6CU8 is a medium mu triode and sharp cutoff pentode contained in a T-6½ envelope. The pentode section is suitable for use as an IF, video or agc amplifier. The triode section is well suited for use in low frequency oscillator, sync-separator, sync-clipper and phase-splitter circuits.

Type 6CU8 has controlled heater warm-up time for series string operation.

AVERAGE PLATE CHARACTERISTICS (PENTODE SECTION)



6CU8 (Cont'd)

AVERAGE PLATE CHARACTERISTICS (TRIODE SECTION)

