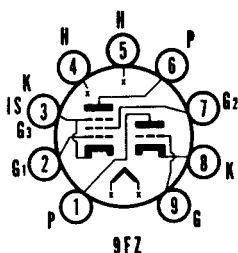




SYLVANIA TYPE 6CM8 5CM8

HIGH-MU TRIODE
SHARP CUTOFF PENTODE



MECHANICAL DATA

Bulb.....		T-6 $\frac{1}{2}$
Base.....	E9-1, Small	Button 9-Pin
Outline.....		6-2
Basing.....		9FZ
Cathode.....	Coated	Unipotential
Mounting Position.....		Any

ELECTRICAL DATA

HEATER CHARACTERISTICS

	5CM8	6CM8
Heater Voltage.....	4.7	6.3 Volts
Heater Current.....	600	450 Ma
Heater Warm-up Time ¹	11	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 (Approx.)

Triode Section

Grid to Plate.....	1.9 μf
Input: g to (h + k).....	1.6 μf
Output: p to (h + k).....	0.22 μf

Pentode Section

Grid No. 1 to Plate.....	.04 μf Max.
Input: g1 to (h+k+g2+g3+I.S.).....	6.0 μf
Output: p to (h+k+g2+g3+I.S.).....	2.6 μf

Coupling

Pentode Plate to Triode Grid.....	0.01 μf Max.
Pentode Grid No. 1 to Triode Plate.....	0.15 μf Max.
Pentode Plate to Triode Plate.....	0.10 μf Max.

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	
Positive Grid No. 1 Voltage.....	0	0 Volts
Plate Dissipation.....	1.0	2.0 Watts
Grid No. 2 Dissipation.....		0.5 Watt
Grid No. 1 Circuit Resistance		
Self Bias.....		1.0 Megohm
Fixed Bias.....		0.25 Megohm

CHARACTERISTICS

Class A₁ Amplifier

	Triode Section	Pentode Section
Plate Supply Voltage.....	250	200 Volts
Grid No. 2 Voltage.....		150 Volts
Grid No. 1 Voltage.....	-2	0 Volts
Cathode Bias Resistor.....		180 Ohms
Plate Current.....	1.8	9.5 Ma
Grid No. 2 Current.....		2.8 Ma
Amplification Factor.....	100	
Plate Resistance (approx.).....	50,000	600,000 Ohms
Transconductance.....	2000	6200 μmhos
Grid No. 1 Voltage for $I_b = 10 \mu\text{a}$ (approx.)...		-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.

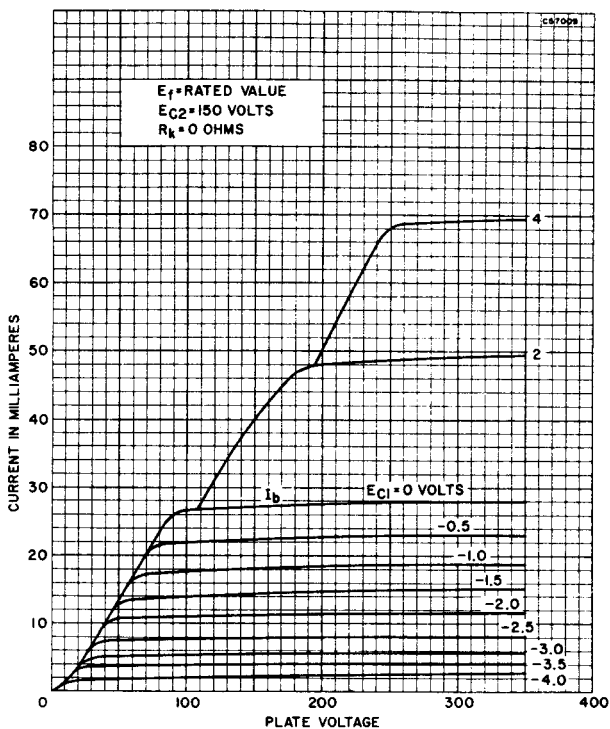
APPLICATION

The Sylvania Type 6CM8 is a high mu triode and sharp cutoff pentode. The pentode section may be used as an I F amplifier, video amplifier, AGC amplifier and reactance tube.

The 5CM8 is identical to the 6CM8 except for heater characteristics. Both types employ controlled heater warm-up time for services in series heater string television receivers.

6CM8, 5CM8 (Cont'd)

AVERAGE PLATE CHARACTERISTICS (PENTODE SECTION)



AVERAGE PLATE CHARACTERISTICS (TRIODE SECTION)

