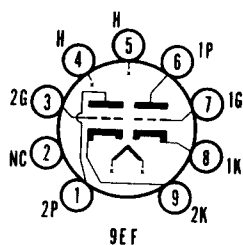




SYLVANIA TYPE 6CS7 8CS7

DOUBLE TRIODE



MECHANICAL DATA

Bulb.....	T-6½
Base.....	E9-1, Small Button, 9-Pin
Outline.....	6-3
Basing.....	9EF
Cathode.....	Coated Unipotential
Mounting Position.....	Any

ELECTRICAL DATA

HEATER CHARACTERISTICS

	6CS7	8CS7
Heater Voltage.....	6.3	8.4 Volts
Heater Current.....	600	450 Ma
Heater Warm-up Time (See Appendix).....	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 (Unshielded)

	Triode No. 1 ¹	Triode No. 2
Grid to Plate.....	2.6	2.6 μμf
Input: g to (k+h+e.s.).....	1.8	3.0 μμf
Output: p to (k+h+e.s.).....	0.5	0.5 μμf

RATINGS (Design Center Values—Except as Noted)

Vertical Deflection Oscillator and Amplifier²

	Triode No. 1 ¹ (Oscillator)	Triode No. 2 (Amplifier)
D C Plate Voltage.....	500	500 Volts Max
Peak Positive Pulse Plate Voltage (Abs. Max.).....		2200 Volts
Peak Negative Pulse Grid Voltage.....	400	250 Volts Max
Plate Dissipation ³	1.25	6.5 Watts Max
Average Cathode Current.....	20	30 Ma Max
Peak Cathode Current.....	70	105 Ma Max
Grid Circuit Resistance.....	2.2	2.2 Megohms Max

AVERAGE CHARACTERISTICS

	Triode No. 1 ¹	Triode No. 2
Plate Voltage.....	250	250 Volts
Grid Voltage.....	-8.5	-10.5 Volts
Plate Current.....	10.5	19.0 Ma
Transconductance.....	2200	4500 μmhos
Amplification Factor.....	17.0	15.5
Plate Resistance.....	7700	3450 Ohms
Plate Current at $E_c = -16$ Volts.....		3.0 Ma
Grid Voltage for $I_b = 10 \mu a$	-24	Volts
Grid Voltage for $I_b = 50 \mu a$		-22 Volts

NOTES:

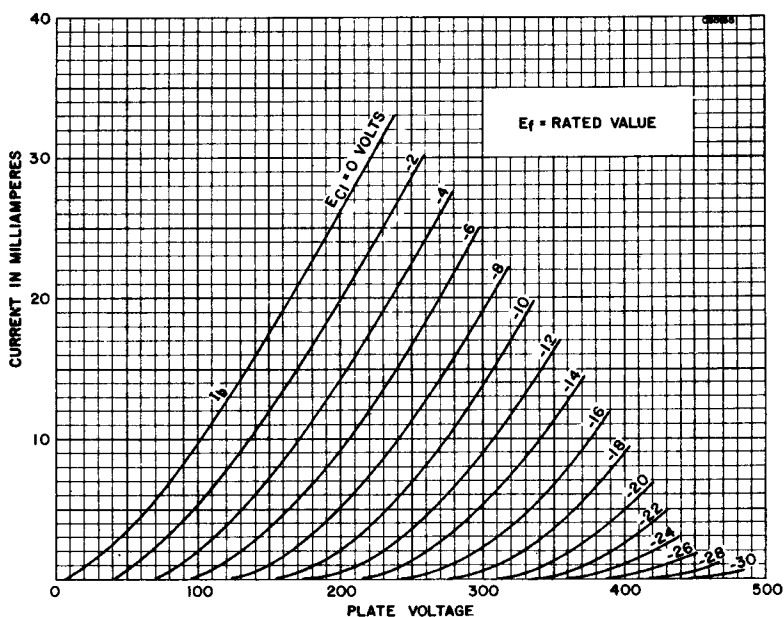
- Triode No. 1 connects to pins 6, 7 and 8.
Triode No. 2 connects to pins 1, 3 and 9.
- For operation in a 525 line, 30-frame system as described in "Standards of Good Engineering Practice for Television Broadcasting Stations; Federal Communications Commission." The duty cycle of the voltage pulse must not exceed 15% of one scanning cycle.
- In stages operating with grid leak bias, an adequate cathode bias resistor or other suitable means is required to protect the tube in the absence of excitation.

APPLICATION

The Sylvania Types 6CS7 and 8CS7 are miniature, double triodes having dissimilar sections. Section No. 1 is intended for operation as a vertical deflection oscillator and Section No. 2 as a vertical deflection amplifier. The 6CS7 and 8CS7 incorporates controlled heater warm-up time to insure dependable operation in television receivers employing a series heater string.

6CS7, 8CS7 (Cont'd)

AVERAGE PLATE CHARACTERISTICS TRIODE NO. 1



AVERAGE PLATE CHARACTERISTICS TRIODE NO. 2

