

Grid-No.3 Voltage (Approx.) for plate current of 50 μ A	-2.2	—	volts
Grid-No.1 Voltage (Approx.) for plate current of 50 μ A	—	-2.5	volts

Gated Amplifier Service

MAXIMUM RATINGS (Design-Center Values)

Plate Voltage	300	volts
Grids-No.2-and-No.4 Supply Voltage	300	volts
Grids-No.2-and-No.4 Voltage	See curve page 98	
Cathode Current	14	mA
Plate Dissipation	1	watt
Grids-No.2-and-No.4 Input:		
For grids-No.2-and-No.4 voltages up to 150 volts	1	watt
For grids-No.2-and-No.4 voltages between 150 and 300 volts	See curve page 98	

MAXIMUM CIRCUIT VALUES

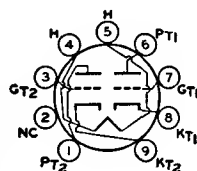
Grid-No.1-Circuit Resistance	0.47	megohm
Grid-No.3-Circuit Resistance	2.2	megohms

6CS7

8CS7

MEDIUM-MU DUAL TRIODE

Miniature type used as combined vertical-deflection oscillator and vertical-deflection amplifier in television receivers. Unit No.1 is used as a conventional blocking oscillator in vertical-deflection circuits, and unit No.2 as a vertical-deflection amplifier. Outline section, tube 9-contact socket. Type 8CS7 is identical with type 6CS7 except for heater ratings.



9EF

	6CS7	8CS7	
Heater Voltage (ac/dc)	6.3	8.4	volts
Heater Current	0.6	0.45	ampere
Heater Warm-up Time (Average)	11	11	seconds
Heater-Cathode Voltage:			
Peak value	±200 max	±200 max	volts
Average value	100 max	100 max	volts
Direct Interelectrode Capacitances (Approx.):	Unit No.1	Unit No.2	
Grid to Plate	2.6	2.6	pF
Grid to Cathode and Heater	1.8	3	pF
Plate to Cathode and Heater	0.5	0.5	pF

Class A₁ Amplifier

CHARACTERISTICS

	Unit No.1 Oscillator	Unit No.2 Amplifier	
Plate Voltage	250	250	volts
Grid Voltage	-8.5	-10.5	volts
Amplification Factor	17	15.5	
Plate Resistance (Approx.)	7700	3450	ohms
Transconductance	2200	4500	μ mhos
Plate Current	10.5	19	mA
Plate Current for grid voltage of -16 volts	—	3	mA
Grid Voltage (Approx.) for plate current of 10 μ A	-24	—	volts
Grid Voltage (Approx.) for plate current of 50 μ A	—	-22	volts

Vertical-Deflection Oscillator and Amplifier

For operation in a 525-line, 30-frame system

	Unit No.1 Oscillator	Unit No.2 Amplifier	
MAXIMUM RATINGS (Design-Center Values)			
DC Plate Voltage	500	500	volts
Peak Positive-Pulse Plate Voltage# (Absolute Maximum)	—	2200 Δ	volts
Peak Negative-Pulse Grid Voltage	400	250	volts
Peak Cathode Current	70	105	mA
Average Cathode Current	20	30	mA
Plate Dissipation	1.25	6.5	watts
MAXIMUM CIRCUIT VALUES			
Grid-Circuit Resistance	2.2	2.2	megohms

Pulse duration must not exceed 15% of a vertical scanning cycle (2.5 milliseconds).

 Δ Under no circumstances should this absolute value be exceeded.