

	Pentode Connection			Triode* Connection	
Plate Resistance (Approx.)	—	—	18000	—	ohms
Transconductance	—	—	7300	—	μ mhos
Amplification Factor	—	—	—	4.4	—
Plate Current	—	345*	65	—	mA
Grid-No.2 Current	—	27*	1.8	—	mA
Grid-No.1 Voltage (Approx.) for plate current of 1 mA	—100	—	—42	—	volts

* Grid No.2 tied to plate.

† This value can be measured by a method involving a recurrent waveform such that the maximum ratings of the tube will not be exceeded.

Horizontal-Deflection Amplifier

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

MAXIMUM RATINGS (Design-Maximum Values)

DC Plate Supply Voltage	770	volts
Peak Positive-Pulse Plate Voltage†	6500	volts
Peak Negative-Pulse Plate Voltage	1500	volts
DC Grid-No.2 Voltage	220	volts
Peak Negative-Pulse Grid-No.1 Voltage	330	volts
DC Grid-No.1 Voltage	—55	volts
Peak Cathode Current	550	mA
Average Cathode Current	175	mA
Plate Dissipation†	17.5	watts
Grid-No.2 Input	3.5	watts
Bulb Temperature (At hottest point)	220	°C

MAXIMUM CIRCUIT VALUE

Grid-No.1-Circuit Resistance	1	megohm
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Pulse duration must not exceed 15% of a horizontal scanning cycle (10 microseconds).

† A bias resistor or other means is required to protect the tube in absence of excitation.

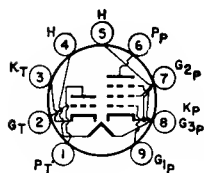
Refer to chart at end of section.

6GV8

HIGH-MU TRIODE— POWER PENTODE

**6GV8/
EL500**
9GV8/XCL85

Miniature type used for sync-amplifier and video-output applications in television receivers. Outlines section, 6G; requires miniature 9-contact socket. Type 9GV8/XCL85 is identical with type 6GV8/EL500 except for heater ratings.



9LY

	6GV8/ EL500	9GV8/ XCL85	
Heater Voltage (ac/dc)	6.3	9.5	volts
Heater Current	0.9	0.6	ampere
Peak Heater-Cathode Voltage	±220 max	±220 max	volts

Class A₁ Amplifier

MAXIMUM RATINGS (Absolute-Maximum Values)

	Triode Unit	Pentode Unit	
Plate Supply Voltage	550	550	volts
Peak Plate Voltage*	—	2000	volts
DC Plate Voltage	250	250	volts
Grid-No.2 (Screen-Grid) Supply Voltage	—	550	volts
Grid-No.2 Voltage	—	250	volts
Peak Cathode Current*	200	—	mA
Average Cathode Current	15	75	mA
Plate Dissipation	0.5	7	watts
Grid-No.2 Input	—	2	watts

CHARACTERISTICS

Plate Voltage	100	50	65	170	volts
Grid-No.2 Voltage	—	170	210	170	volts
Grid-No.1 Voltage	—0.8	—1	—1	—15	volts
Amplification Factor	50	—	—	—	—
Mu-Factor, Grid No.1 to Grid No.2	—	—	—	7	—
Plate Resistance (Approx.)	7600	—	—	25000	ohms
Transconductance	6500	—	—	7500	μ mhos
Plate Current	5	200*	240*	41	mA
Grid-No.2 Current	—	40*	50*	2.7	mA

MAXIMUM CIRCUIT VALUES**Grid-No.1-Circuit Resistance:**

For fixed-bias operation	1	1	megohm
For cathode-bias operation	3.3	2.2	megohms

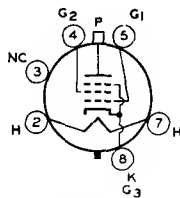
* Maximum pulse duration 5 per cent of a cycle with a maximum of 1 millisecond.

* Maximum pulse duration 200 microseconds. If a larger flyback is required, this value may be reduced to 100 mA with a maximum pulse duration of 400 microseconds.

* This value can be measured by a method involving a recurrent waveform such that the maximum tube ratings will not be exceeded.

6GW6

Refer to chart at end of section.

**6GW6/
6DQ6B****12GW6/12DQ6B****17GW6/17DQ6B****BEAM POWER TUBE****6AM**

	6GW6/ 6DQ6B	12GW6/ 12DQ6B	17GW6/ 17DQ6B	
Heater Voltage (ac/dc)	6.3	12.6	16.8	volts
Heater Current	1.2	0.6	0.45	amperes
Heater Warm-up Time (Average)	—	11	11	seconds
Heater-Cathode Voltage:				
Peak value	±200 max	±200 max	±200 max	volts
Average value	100 max	100 max	100 max	volts
Direct Interelectrode Capacitances (Approx.):				
Grid No.1 to Plate	—	—	0.5	pF
Grid No.1 to Cathode, Heater, Grid No.2, and Grid No.3	—	—	17	pF
Plate to Cathode, Heater, Grid No.2, and Grid No.3	—	—	7	pF

Class A₁ Amplifier**CHARACTERISTICS**

	Triode Connection	Pentode Connection	
Plate Voltage	150	60	250
Grid-No.2 Voltage	150	150	150
Grid-No.1 Voltage	-22.5	0	-22.5
Mu-Factor, Grid No.2 to Grid No.1	4.4	—	—
Plate Resistance (Approx.)	—	—	15000
Transconductance	—	—	7100
Plate Current	—	390*	70
Grid-No.2 Current	—	32*	2.1
Grid-No.1 Voltage (Approx.) for plate current of 1 mA	—	—	-42

* This value can be measured by a method involving a recurrent waveform such that the maximum ratings of the tube will not be exceeded.

