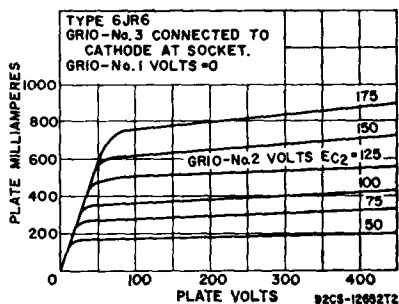
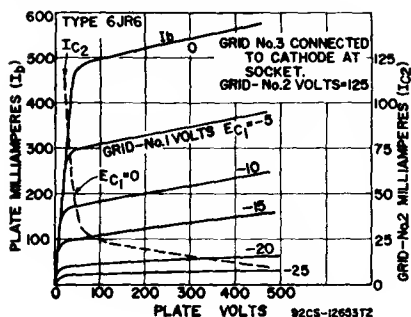


Plate Current	—	—	470 $\frac{1}{2}$	45	mA
Grid-No.2 Current	—	—	32 $\frac{1}{2}$	1.5	mA
Grid-No.1 Voltage for plate current of 1 mA	—	-75	—	-32	volts
Amplification Factor	4.7	—	—	—	



Horizontal-Deflection Amplifier

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

MAXIMUM RATINGS (Design-Maximum Ratings)

Plate Supply Voltage	770	volts
Peak Positive-Pulse Plate Voltage*	6500	volts
Peak Negative-Pulse Plate Voltage	1500	volts
Grid-No.3 Voltage*	75	volts
Grid-No.2 Voltage	220	volts
Grid-No.1 Voltage, Negative-bias value	55	volts
Peak Negative-Pulse Grid-No.1 Voltage	330	volts
Peak Cathode Current	950	mA
Average Cathode Current	275	mA
Grid-No.2 Input	3.5	watts
Plate Dissipation*	17	watts
Bulb Temperature (At hottest point)	240	°C

MAXIMUM CIRCUIT VALUES

Grid-No.1-Circuit Resistance:

Cathode bias (with min. $R_k = 100\Omega$)	1	megohm
Grid-leak bias (with signal peak clamped to zero bias)	10	megohms
Fixed bias (where positive grid current is not drawn)	0.47	megohm

* Grid No. 2 connected to plate at socket.

Pulse duration must not exceed 15% of one horizontal scanning cycle (10 microseconds).

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

* In this service, a positive value may be applied to grid No.3 to minimize "snivets" interference; a typical value for this voltage is 30 volts.

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

**6JS6
6JS6A**

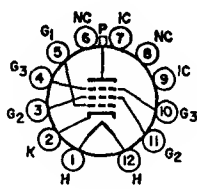
Refer to chart at end of section.

6JS6C

23JS6A, 31JS6C

BEAM POWER TUBE

Duodecar types used as horizontal-deflection amplifiers in color and black-and-white television receivers. Outlines section, 16B; requires duodecar 12-contact socket. Types 23JS6A and 31JS6A are identical with type 6JS6C except for heater ratings.



12FY

Heater Voltage (ac/dc)	6JS6C	23JS6A	31JS6A	
Heater Current	6.3	23.6	31.5	volts
Heater Warm-up Time (Average)	2.25	0.6	0.45	amperes
	—	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:

Grid No.1 to Plate	0.7	pF
Grid No.1 to Cathode, Heater, Grid No.2, and Grid No.3	24	pF
Plate to Cathode, Heater, Grid No.2, and Grid No.3	10	pF

Class A₁ Amplifier

CHARACTERISTICS	Triode†† Connection		Pentode Connection		
	125	5000	60	175	
Plate Voltage	—	—	Connected to cathode at socket		volts
Grid No.3 (Suppressor Grid)	125	125	125	125	volts
Grid-No.2 (Screen-Grid) Voltage	—25	—	0	—25	volts
Grid-No.1 (Control-Grid) Voltage	—	—	—	5500	ohms
Plate Resistance (Approx.)	—	—	—	11500	μ mhos
Transconductance	—	—	600†	130	mA
Plate Current	—	—	32†	2.8	mA
Grid-No.2 Current	—	—	—	—	volts
Grid-No.1 Voltage (Approx.) for plate current of 1 mA	—	—125	—	—54	
Triode Amplification Factor	3	—	—	—	

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

†† Grid No.2 connected to plate.

Horizontal-Deflection Amplifier

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

MAXIMUM RATINGS (Design-Maximum Values)

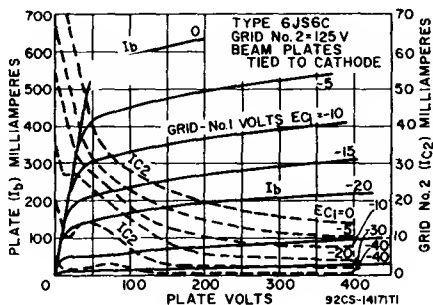
DC Plate Supply Voltage	990	volts
Peak Positive-Pulse Plate Voltage#	7500	volts
Peak Negative-Pulse Plate Voltage	1200	volts
DC Grid-No.3 Voltage	75	volts
DC Grid-No.2 Voltage	220	volts
Peak Negative-Pulse Grid-No.1 Voltage	330	volts
Average Cathode Current	350	mA
Peak Cathode Current	1200	mA
Plate Dissipation**	30	watts
Grid-No.2 Input	5.5	watts
Bulb Temperature (At hottest point)	225	°C

MAXIMUM CIRCUIT VALUE

Grid-No.1-Circuit Resistance		
For grid bias feedback HV regulation	0.47	megohm
For dc or pulse shunt HV regulation	10	megohms

Pulse duration must not exceed 15% of one 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.

6JT6