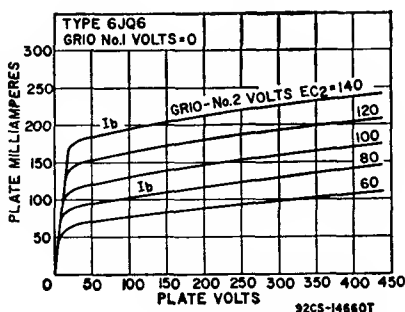
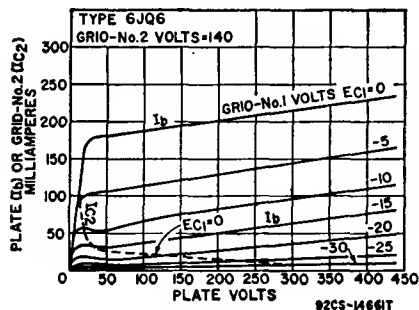


DC Grid-No.2 Voltage	330	volts
Peak Negative-Pulse Grid-No.1 Voltage	150	volts
Average Cathode Current	70	mA
Peak Cathode Current	250	mA
Average Diode-Plate (and Grid-No.3) Current	1	mA
Plate Dissipation	10	watts
Grid-No.2 Input	2	watts
Bulb Temperature (At hottest point)	240	°C



MAXIMUM CIRCUIT VALUES

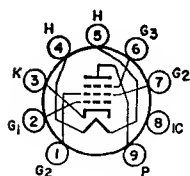
Grid-No.1—Circuit Resistance:

For grid-No.1-resistor-bias operation	2.2	megohms
For cathode-bias operation	2.2	megohms

* Grid No.3 and diode plate connected to cathode, and grid-No.2 connected to plate at socket.

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

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



9QU

BEAM POWER TUBE

6JR6

17JR6, 22JR6, 33JR6

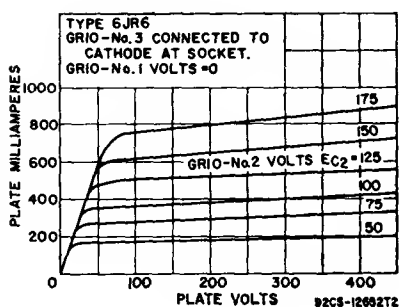
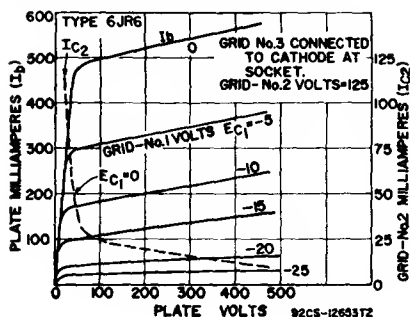
Novar type used for horizontal-deflection amplifier service in low B+, black-and-white television receivers. Outlines section, 31D; requires novar 9-contact socket. Types 17JR6, 22JR6 and 33JR6 are identical with type 6JR6 except for heater ratings.

	6JR6	17JR6	22JR6	33JR6	
Heater Voltage (ac/dc)	6.3	16.8	22	33	volts
Heater Current	1.6	0.6	0.45	0.3	amperes
Heater Warm-up Time (Average)	—	11	11	11	seconds
Heater-Cathode Voltage:					
Peak value	±200 max	±200 max	±200 max	±200 max	volts
Average value	100 max	100 max	100 max	100 max	volts
Direct Interelectrode Capacitances (Approx.):					
Grid No.1 to Plate				0.7	pF
Grid No.1 to Cathode, Heater, Grid No.2, and Grid No.3				22	pF
Plate to Cathode, Heater, Grid No.2, and Grid No.3				9	pF

Class A₁ Amplifier

CHARACTERISTICS	Triode* Connection	Pentode Connection	
Plate Voltage	125	50 130	volts
Peak Positive-Pulse Plate Voltage#	—	6500	volts
Grid No.3 (Suppressor Grid)	—	Connected to cathode at socket	
Grid-No.2 (Screen-Grid) Voltage	125	125 125	volts
Grid-No.1 (Control-Grid) Voltage	—20	— 0 —20	volts
Plate Resistance (Approx.):	—	— 18000	ohms
Transconductance	—	— 7000	μmhos

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

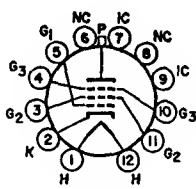
Refer to chart at end of section.

6JS6C

BEAM POWER TUBE

23JS6A, 31JS6C

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	volts
Heater Current	6.3	23.6	31.5	amperes
Heater Warm-up Time (Average)	2.25	0.6	0.45	seconds
	—	11	11	