

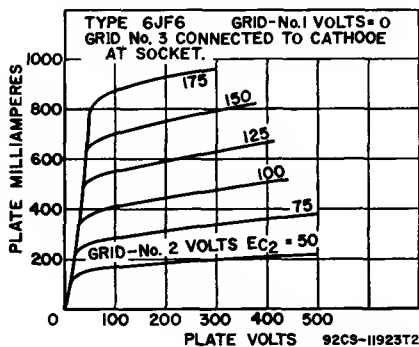
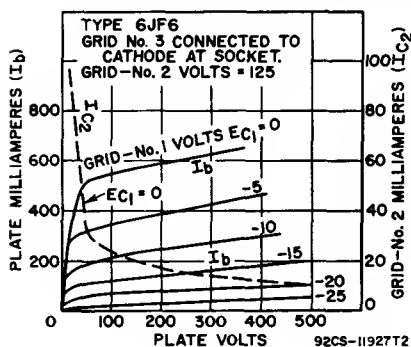
* Grid-No.2 connected to plate at socket.

† 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 horizontal scanning cycle (10 microseconds).

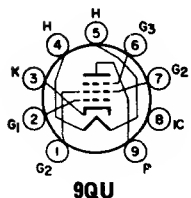
* In this service, a positive value may be applied to grid No.3 to minimize "snivets" interference; a typical value for this voltage is 50 volts.

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



Refer to chart at end of section.

6JG6



BEAM POWER TUBE

6JG6A

17JG6A, 22JG6A

Novar type used as horizontal-deflection amplifier in low-B+, black-and-white television receivers. Outlines section, 31B; requires novar 9-contact socket. For curves of average plate characteristics, refer to type 6JF6. Types 17JG6A and 22JG6A are identical with type 6JG6A except for heater ratings.

Heater Voltage (ac/dc)	
Heater Current	
Heater Warm-up Time (Average)	

6JG6A	17JG6A	22JG6A	
6.3	16.8	22	volts
1.6	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		22	pF
Plate to Cathode, Heater, Grid No.2, and Grid No.3		9	pF

Class A₁ Amplifier

CHARACTERISTICS

	Triode ^a Connection	Pentode Connection	
Plate Voltage	125	50 130	volts
Grid No.3 (Suppressor Grid)	—	Connected to cathode at socket	
Grid-No.2 (Screen-Grid) Voltage	—	125 125	volts
Grid-No.1 (Control-Grid) Voltage	-20	0 -20	volts
Amplification Factor	4.1	—	
Plate Resistance (Approx.)	—	12000	ohms
Transconductance	—	10000	μmhos
Plate Current	—	525* 80	mA
Grid-No.2 Current	—	32* 2.5	mA
Grid-No.1 Voltage (Approx.), for plate current of 1 mA	—	— -40	volts

* With 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.

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.3 Voltage*	75	volts
DC Grid-No.2 Voltage	220	volts
DC 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
Plate Dissipation†	17	watts
Grid-No.2 Input	3.5	watts
Bulb Temperature (At hottest point)	240	°C

MAXIMUM CIRCUIT VALUE

Grid-No.1-Circuit Resistance, for grid-No.1-resistor-bias operation	2.2	megohms
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Pulse duration must not exceed 15% of a horizontal scanning cycle (10 microseconds).

* In a horizontal-deflection-amplifier service, a positive voltage (typical value, 30 volts) may be applied to grid No.3 to reduce "snivets" interference, which may occur in both vhf and uhf television receivers.

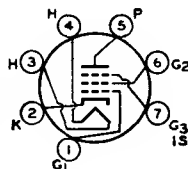
† A bias resistor or other means is required to protect the tube in absence of excitation.

6JH6

4JH6

SEMIREMOTE-CUTOFF
PENTODE

Miniature type used in the gain-controlled picture amplifier stages of color and black-and-white television receivers. Outlines section, 5C; requires miniature 7-contact socket. For curves of average plate characteristics, refer to type 6BZ6. Type 4JH6 is identical with type 6JH6 except for heater ratings.



7CM

	4JH6 Series	6JH6 Parallel	
Heater Arrangement			
Heater Voltage (ac/dc)	4.2	6.3	volts
Heater Current	0.45	0.3	ampere
Heater Warm-up Time	11	—	seconds
Heater-Cathode Voltage:			
Peak value	±200 max	±200 max	volts
Average value	100 max	100 max	volts
Direct Interelectrode Capacitances:			
Grid No.1 to Plate	Unshielded	Shielded*	
Grid No.1 to Cathode, Heater, Grid No.2,	0.025 max	0.015 max	pF
Grid No.3, and Internal Shield	7	7	pF
Plate to Cathode, Heater, Grid No.2, Grid No.3,	2	3	pF
and Internal Shield			

* With external shield connected to cathode.

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

Plate Voltage	300	volts
Grid-No.3 (Suppressor-Grid) Voltage, Positive value	0	volts
Grid-No.2 (Screen-Grid) Supply Voltage	300	volts
Grid-No.2 Voltage	See curve page 98	
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0	volts
Grid-No.2 Input:		
For grid-No.2 voltages up to 150 volts	0.55	watt
For grid-No.2 voltages between 150 and 300 volts	See curve page 98	

CHARACTERISTICS

Plate Supply Voltage	125	volts
Grid No.3	Connected to cathode at socket	
Grid-No.2 Supply Voltage	125	volts
Cathode-Bias Resistor	56	ohms
Plate Resistance (Approx.)	0.26	megohm
Transconductance	8000	μmhos
Transconductance Range for grid-No.1 voltage of -4.5 volts and cathode-bias resistor of 56 ohms	400-900	μmhos
Plate Current	14	mA
Grid-No.2 Current	3.6	mA
Grid-No.1 Voltage (Approx.) for transconductance of 50 μmhos	-19	volts