

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

Vertical-Deflection Amplifier

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

MAXIMUM RATINGS (Design-Maximum Values)

DC Plate Voltage	350	volts
Peak Positive-Pulse Plate Voltage#	2500	volts
Grid-No.2 Voltage	300	volts
Peak Cathode Current	260	mA
Average Cathode Current	75	mA
Plate Dissipation†	15	watts
Grid-No.2 Input†	2.75	watts
Bulb Temperature (At hottest point)	200	°C

MAXIMUM CIRCUIT VALUES

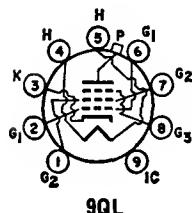
Grid-No.1-Circuit Resistance:		
For fixed-bias operation	1	megohm
For cathode-bias operation	2.2	megohms

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

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

Refer to chart at end of section.

6JB6



9QL

BEAM POWER TUBE

6JB6A

12JB6A, 17JB6A

Novar types used as high-efficiency horizontal-deflection amplifiers in television receivers. Outlines section, 32A; requires novar 9-contact socket. Types 12JB6A and 17JB6A are identical with type 6JB6A except for heater ratings.

	6JB6A	12JB6A	17JB6A	
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			0.2	pF
Grid No.1 to Cathode, Heater, Grid No.2, and Grid No.3			15	pF
Plate to Cathode, Heater, Grid No.2, and Grid No.3			6	pF

Class A₁ Amplifier

CHARACTERISTICS

	Triode Connection ^A	Pentode Connection	
Plate Voltage	150	60 150	volts
Grid No.3 (Suppressor Grid)	—	Connected to cathode at socket	
Grid-No.2 (Screen-Grid) Voltage	—	150 150	volts
Grid-No.1 (Control-Grid) Voltage	—22.5	0 —22.5	volts
Mu-Factor, Grid No.2 to Grid No.1	4.4	—	
Plate Resistance (Approx.)	—	15000	ohms
Transconductance	—	7100	μmhos
Plate Current	—	390*	mA
Grid-No.2 Current	—	32*	mA
Grid-No.1 Voltage for plate current of 1 mA	—	—42	volts

^A Grid No.2 connected 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.3 Voltage†	70	volts
DC Grid-No.2 Voltage	220	volts
DC Grid-No.1 Voltage	-55	volts
Peak Negative-Pulse Grid-No.1 Voltage	330	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)	240	°C

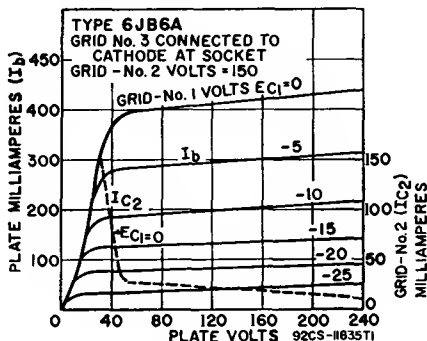
MAXIMUM CIRCUIT VALUE

Grid-No.1-Circuit Resistance, for grid-resistor-bias operation 1 megohm

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

† For horizontal-deflection service, a positive voltage may be applied to grid No.3 to minimize "snivets" interference in both vhf and uhf television receivers. A typical value is 30 volts.

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

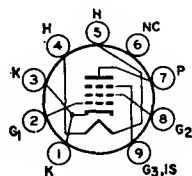
**6JC6**

Refer to chart at end of section.

6JC6A**SHARP-CUTOFF PENTODE**

3JC6A, 4JC6A

Miniature type with frame grid used in if-amplifier stages of color and black-and-white television receivers utilizing intermediate frequencies in the order of 40 MHz. Outlines section, 6B; requires miniature 9-contact socket. Type 4JC6 is identical with type 6JC6 except for heater ratings. Types 3JC6A and 4JC6A are identical with type 6JC6A except for heater ratings.

**9PM**

	3JC6A	4JC6A	6JC6A	
Heater Voltage (ac/dc)	3.5	4.5	6.3	volts
Heater Current	0.6	0.45	0.3	ampere
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:				
Grid No.1 to Plate			0.019 max	pF
Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield			8.5	pF
Plate to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield			3	pF

Class A₁ Amplifier**MAXIMUM RATINGS (Design-Maximum Values)**

Plate Voltage	330	330	volts
Grid-No.3 (Suppressor-Grid) Voltage, Positive value	0	0	volts
Grid-No.2 (Screen-Grid) Supply Voltage	330	330	volts
Grid-No.2 Voltage		See curve page 300	