

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	volts
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	μ mhos
Plate Current	—	390 ^a 70	mA
Grid-No.2 Current	—	32 ^a 2.1	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

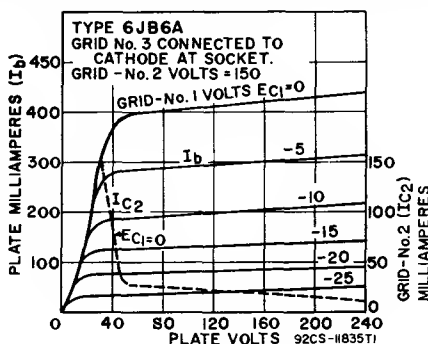
MAXIMUM CIRCUIT VALUE

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.

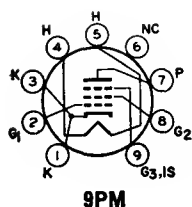


SHARP-CUTOFF PENTODE

6JC6
6JC6A

3JC6A, 4JC6, 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.



	3JC6A	4JC6 4JC6A	6JC6 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:	6JC6	6JC6A		
Grid No.1 to Plate	0.019 max	0.019 max		pF
Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield	8.2	8.5		pF
Plate to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield	3	3		pF

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

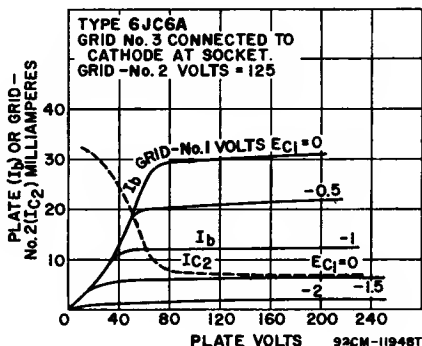
Plate Voltage	330	330	volts
Grid-No.3 (Suppressor-Grid) Voltage, Positive value	0	0	volts
Grid-No.2 (Screen-Grid) Supply Voltage	330	330	volts
Grid-No.2 Voltage			See curve page 98
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0	0	volts
Plate Dissipation	2.5	3.1	watts
Grid-No.2 Input:			
For grid-No.2 voltages up to 165 volts	0.6	0.7	watt
For grid-No.2 voltages between 165 and 330 volts			See curve page 98

CHARACTERISTICS

Plate Supply Voltage	125	125	volts
Grid No.3	Connected to cathode at socket		
Grid-No.2 Supply Voltage	125	125	volts
Cathode-Bias Resistor	56	56	ohms
Plate Resistance (Approx.)	0.18	0.18	megohm
Transconductance	15000	16000	μmhos
Plate Current	13	14	mA
Grid-No.2 Current	3.2	3.4	mA
Grid-No.1 Voltage (Approx.) for plate current of 100 μA	—3	—3	volts

MAXIMUM CIRCUIT VALUES

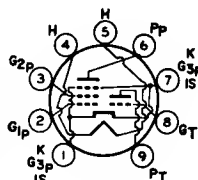
Grid-No.1-Circuit Resistance:			
For fixed-bias operation	0.25	0.25	megohm
For cathode-bias operation	1	1	megohm



6JC6

MEDIUM-MU TRIODE—
SHARP-CUTOFF PENTODE

Miniature type used as combined vhf oscillator and mixer tube in television receivers. Outlines section, 6B; requires miniature 9-contact socket. Heater: volts (ac/dc), 6.3; amperes, 0.45; warm-up time (average), 11 seconds; maximum heater-cathode volts, ±200 peak, 100 average.



9PA