

Direct Interelectrode Capacitances (Approx.):

Grid No.1 to Plate	0.4	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	10	pF

Class A₁ Amplifier

CHARACTERISTICS

Plate Voltage	75	175	volts
Grid-No.2 Voltage	150	175	volts
Grid-No.1 Voltage	0	-30	volts
Mu-Factor, Grid No.2 to Grid No.1	—	3.8	
Plate Resistance (Approx.)	—	5000	ohms
Transconductance	—	8800	μmhos
Plate Current	460*	90	mA
Grid-No.2 Current	42*	6	mA
Grid-No.1 Voltage (Approx.) for plate current of 1 mA	—	-60	volts

* These values can be measured by a method involving a recurrent waveform such that the maximum rating 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 Voltage	880	volts
Peak Positive-Pulse Plate Voltage#	6800	volts
Peak Negative-Pulse Plate Voltage	1650	volts
DC Grid-No.2 (Screen-Grid) Voltage	220	volts
DC Grid-No.1 (Control-Grid) Voltage	-55	volts
Peak Negative-Pulse Grid-No.1 Voltage	220	volts
Peak Cathode Current	850	mA
Average Cathode Current	240	mA
Grid-No.2 Input	4	watts
Plate Dissipation†	26	watts
Bulb Temperature (At hottest point)	220	°C

MAXIMUM CIRCUIT VALUE

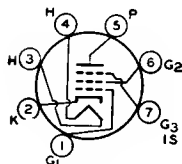
Grid-No.1-Circuit Resistance	0.47	megohm
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Pulse duration must not exceed 15% of a horizontal scanning cycle (10 microseconds).

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

Refer to chart at end of section.

6CB6



7CM

6CB6A
6CB6A/
6CF6

SHARP-CUTOFF PENTODE 3CB6, 3CB6/3CF6, 4CB6

Miniature types used in color and black-and-white television receivers as if amplifier at frequencies up to about 45 MHz and as rf amplifiers in vhf television tuners. Outlines section, 5C; requires miniature 7-contact socket.

For typical operation as resistance-coupled amplifiers, refer to Resistance-Coupled Amplifier section. Types 3CB6, 3CB6/3CF6, and 4CB6 are identical with type 6CB6A except for heater ratings.

	3CB6 3CB6/3CF6	4CB6	6CB6A 6CB6A/6CF6	
Heater Voltage (ac/dc)	3.15	4.2	6.3	volts
Heater Current	0.6	0.45	0.3	ampere
Heater Warm-up Time (Average)	11	11	11	seconds
Heater-Cathode Voltage:				
Peak value	{ +200 max -300 max	{ +200 max -300 max	±200 max	volts
Average value	100 max	{ +100 max -200 max	100 max	volts

Direct Interelectrode Capacitances:

Grid No.1 to Plate	0.025 max	0.015 max	pF
Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield	6.5	6.5	pF
Plate to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield	2	3	pF

▲ With external shield connected to cathode.