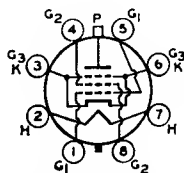


Refer to chart at end of section.
For replacement use type 6CG3/6BW3/6DQ3.

6DQ3

Refer to chart at end of section.

6DQ4



8JC

BEAM POWER TUBE

6DQ5

Glass octal type used as horizontal-deflection amplifier in color and black-and-white television receivers. Outlines section, 21B; requires octal socket.

Heater Voltage (ac/dc)	6.3	volts
Heater Current	2.5	amperes
Heater-Cathode Voltage:		
Peak value	± 200 max	volts
Average value	100 max	volts
Direct Interelectrode Capacitances (Approx.):		
Grid No.1 to Plate	0.5	pF
Grid No.1 to Cathode, Heater, Grid No.2, and Grid No.3	23	pF
Plate to Cathode, Heater, Grid No.2, and Grid No.3	11	pF

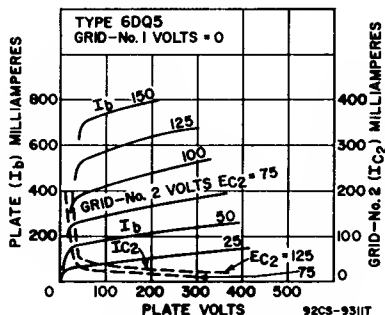
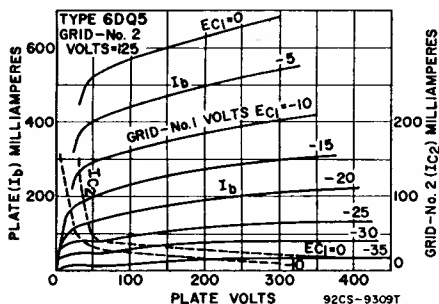
Class A₁ Amplifier

CHARACTERISTICS

	Pentode Connection	Triode* Connection	
Plate Voltage	70 175	125	volts
Grid No.2 (Screen-Grid) Voltage	125 125	—	volts
Grid No.1 (Control-Grid) Voltage	0 —25	—25	volts
Amplification Factor	—	3.3	
Plate Resistance (Approx.)	— 5500	—	ohms
Transconductance	— 10500	—	μ mhos
Plate Current	550* 110	—	mA
Grid-No.2 Current	42* 6	—	mA
Grid-No.1 Voltage (Approx.) for plate mA = 1	— —55	—	volts

* 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 Voltage	990	volts
Peak Positive-Pulse Plate Voltage#	6500	volts
Peak Negative-Pulse Plate Voltage	1100	volts
DC Grid-No.2 (Screen-Grid) Voltage	190	volts
Peak Negative-Pulse Grid-No.1 (Control-Grid) Voltage	250	volts
Peak Cathode Current	1100	mA
Average Cathode Current	315	mA
Grid-No.2 Input	3.2	watts
Plate Dissipation*	24	watts
Bulb Temperature (At hottest point)	220	°C

MAXIMUM CIRCUIT VALUE

Grid-No.1-Circuit Resistance, for grid-resistor-bias operation 0.47 megohm

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.

6DQ6A

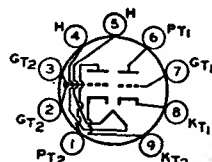
Refer to chart at end of section.

6DQ6B

For replacement use type 6GW6/6DQ6B.

6DR7**10DR7, 13DR7****DUAL TRIODE**

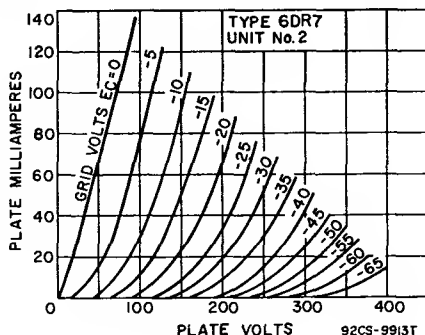
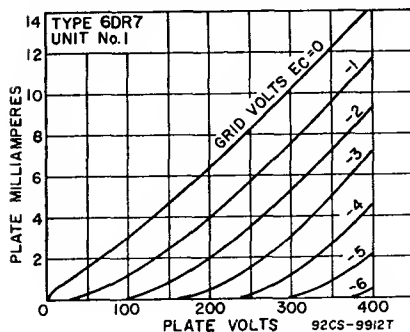
Miniature type containing high-mu and low-mu triodes; used as combined vertical-deflection-oscillator and vertical-deflection-amplifier tube in television receivers. Outlines section, 6E; requires miniature 9-contact socket. Types 10DR7 and 13DR7 are identical with type 6DR7 except for heater ratings.

**9HF**

Heater Voltage (ac/dc)	6.3	9.7	13	volts
Heater Current	0.9	0.6	0.45	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 (Approx.):	Unit No.1	Unit No.2		
Grid to Plate	4.5	8.5		pF
Grid to Cathode and Heater	2.2	5.5		pF
Plate to Cathode and Heater	0.34	1		pF

Class A₁ Amplifier**CHARACTERISTICS**

Plate Voltage	Unit No.1	Unit No.2	volts
Grid Voltage	250	150	volts
Amplification Factor	—3	—17.5	
Plate Resistance (Approx.)	68	6	ohms
Transconductance	40000	925	μmhos
Plate Current	1600	6500	mA
Plate Current for grid voltage of —24 volts	1.4	35	mA
Grid Voltage (Approx.) for plate current of 10 μA	—	10	volts
Grid Voltage (Approx.) for plate current of 50 μA	—5.5	—	volts
	—	—44	volts

**Vertical-Deflection Oscillator and Amplifier**

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

MAXIMUM RATINGS (Design-Maximum Values)

DC Plate Voltage	Unit No.1	Unit No.2	volts
Peak Positive-Pulse Plate Voltage#	Oscillator	Amplifier	volts
	330	275	
	—	1500	