

Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0	0	volts
Plate Dissipation	1	2.5	watts
Grid-No.2 Input:			
For grid-No.2 voltages up to 165 volts	—	0.55	watt
For grid-No.2 voltages between 165 and 330 volts	—	See curve page 300	

CHARACTERISTICS

Plate Voltage	250	125	volts
Grid-No.2 Voltage	—	125	volts
Grid-No.1 Voltage	—2	—1	volts
Amplification Factor	100	—	
Plate Resistance (Approx.)	31500	150000	ohms
Transconductance	3200	10000	μ mhos
Plate Current	1.8	12	mA
Grid-No.2 Current	—	4.5	mA
Grid-No.1 Voltage (Approx.) for plate current of 20 μ A	—3.5	—7	volts

MAXIMUM CIRCUIT VALUES

Grid-No.1-Circuit Resistance:			
For fixed-bias operation	0.5	0.5	megohm
For cathode-bias operation	1	1	megohm

6KU8

Refer to chart at end of section.

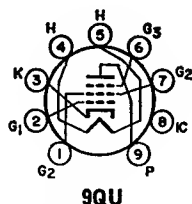
6KV6

Refer to chart at end of section.

6KV6A**BEAM POWER TUBE**

17KV6A, 22KV6A

Novar type used for high-voltage pulse- or shunt-regulator applications in color television receivers. Outlines section, 31D; requires novar 9-contact socket. Types 17KV6A and 22KV6A are identical with type 6KV6A except for heater ratings.

**9QU**

	6KV6A	17KV6A	22KV6A	
Heater Voltage (ac/dc)	6.3	16.8	22	volts
Heater Current	1.6	0.6	0.45	amperes
Heater Warm-up Time	—	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		0.6		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**

Plate Voltage	100	140	volts
Grid-No.3 (Suppressor-Grid) Voltage	0	0	volts
Grid-No.2 (Screen-Grid) Voltage	140	140	volts
Grid-No.1 (Control-Grid) Voltage	0	—24.5	volts
Triode Amplification Factor#	—	4	
Plate Resistance (Approx.)	—	10000	ohms
Transconductance	—	6000	μ mhos
Plate Current	440 ^m	40	mA
Grid-No.2 Current	30 ^m	2.4	mA
Grid-No.1 Voltage for plate current of 1 mA	—	—42	volts

High-Voltage-Pulse Shunt Regulator

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

MAXIMUM RATINGS (Design-Maximum Values)

DC Plate Supply Voltage ($I_b = 0$ mA)	900	volts
Peak Positive-Pulse Plate Voltage ^A	6500	volts

Peak Negative-Pulse Plate Voltage	1500	volts
Peak Positive-Pulse Grid-No.2 Voltage	600	volts
DC Grid-No.3 Voltage	75	volts
DC Grid-No.2 Voltage	220	volts
DC Grid-No.1 Voltage, Negative-bias value	250	volts
Peak Negative-Pulse Grid-No.1 Voltage	330	volts
Peak Cathode Current	950	mA
Average Cathode Current	275	mA
Plate Dissipation†	28●	watts
Grid-No.2 Input	2	watts
Bulb Temperature (At hottest point)	240	°C

MAXIMUM CIRCUIT VALUE

Grid-No.1-Circuit Resistance:

For grid-No.1-resistor-bias operation 1 megohm

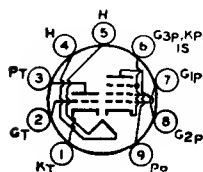
Grid-No.3 and grid-No.2 connected, respectively, to cathode and plate at socket.

• 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).

† Adequate circuit precautions must be taken to protect the tube in the absence of grid-No.1 bias.

● Plate dissipation up to 32 watts maximum are permissible for short periods of time provided the maximum envelope-temperature rating is not exceeded. This condition may exist under high-line voltage, zero picture tube beam current.



9DX

HIGH-MU TRIODE— SHARP-CUTOFF PENTODE

6KV8

11KV8

Miniature type with frame-grid pentode unit used in black-and-white television receivers. The triode unit is used in general-purpose voltage-amplifier, sync-separator, and sound-if-amplifier applications. The pentode unit is used as a video-output tube. Outlines section, 6E; requires miniature 9-contact socket. For curves of

average plate characteristics for triode unit, refer to type 6AW8A. Type 11KV8 is identical with type 6KV8 except for heater ratings.

	6KV8	11KV8	
Heater Voltage (ac/dc)	6.3	10.9	volts
Heater Current	0.775	0.45	ampere
Heater Warm-up Time (Average)	—	11	seconds
Heater-Cathode Voltage:			
Peak value	±200 max	±200 max	volts
Average value	100 max	100 max	volts

Direct Interelectrode Capacitances (Approx.):

Triode Unit:

Grid to Plate 3.7 pF

Grid to Cathode, Heater, Pentode Cathode, Pentode Grid No.3, and Internal Shield 2.5 pF

Plate to Cathode, Heater, Pentode Cathode, Pentode Grid No.3, and Internal Shield 2.4 pF

Triode Grid to Pentode Plate 0.015 max

Pentode Unit:

Grid No.1 to Plate 0.12 max pF

Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield 13 pF

Plate to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield 4.8 pF

Pentode Plate to Triode Plate 0.17 max pF

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

	Triode Unit	Pentode Unit	
Plate Voltage	300	300	volts
Grid-No.2 (Screen-Grid) Supply Voltage	—	300	volts
Grid-No.2 Voltage	—	See curve page 300	
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0	0	volts
Plate Dissipation	1	5	watts
Grid-No.2 Input:			
For Grid-No.2 voltages up to 150 volts	—	1	watt
For Grid-No.2 voltages between 150 and 300 volts	—	See curve page 300	