

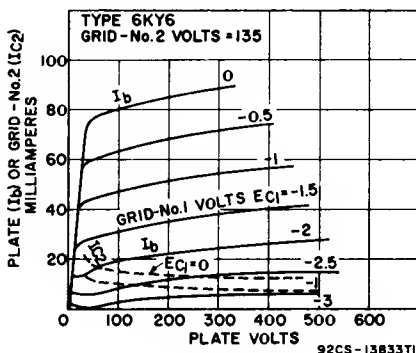
Grid-No.2 Voltage	See curve page 98
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0 volts
Plate Dissipation	9 watts
Grid-No.2 Input:	
For grid-No.2 voltages up to 165 volts	1 watt
For grid-No.2 voltages between 165 and 330 volts	See curve page 98

CHARACTERISTICS

Plate Supply Voltage	200 volts
Grid-No.3 Voltage	Connected to cathode at socket
Grid-No.2 Supply Voltage	135 volts
Grid-No.1 Supply Voltage	0 volts
Cathode-Bias Resistor	47 ohms
Plate Resistance (Approx.)	40000 ohms
Transconductance	30000 μ mhos
Plate Current	30 mA
Grid-No.2 Current	5.2 mA
Grid-No.1 Voltage (Approx.) for plate current of 100 μ A	-4.5 volts

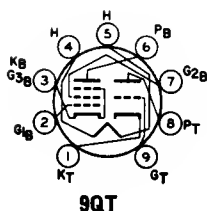
MAXIMUM CIRCUIT VALUES

Grid-No.1-Circuit Resistance:	
For fixed-bias operation	0.1 megohm
For cathode-bias operation	0.25 megohm



Refer to chart at end of section.

6KY8



HIGH-MU TRIODE— BEAM POWER TUBE

6KY8A

15KY8A

Novar type used in combined vertical-deflection-oscillator and vertical-deflection-amplifier applications in black-and-white television receivers having low-voltage "B" supplies. Outlines section, 30A; requires novar 9-contact socket. Type 15KY8A is identical with type 6KY8A except for heater ratings.

Heater Voltage (ac/dc)	6.3	15	volts
Heater Current	1.1	0.45	amperes
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	0.44		pF
Grid to Cathode and Heater	15		pF
Plate to Cathode and Heater	7		pF

Pentode Unit:

Grid No.1 to Plate	0.048	pF
Grid No.1 to Cathode, Heater, Grid No.2, and Grid No.3	2.6	pF
Plate to Cathode, Heater, Grid No.2, and Grid No.3	0.28	pF

Class A₁ Amplifier

CHARACTERISTICS

	Triode Unit	Beam Power Unit		
Plate Voltage	250	50	135	120 volts
Grid-No.2 (Screen-Grid) Voltage	—	120	120	* volts
Grid-No.1 (Control-Grid) Voltage	—3	0	—10	—10 volts
Amplification Factor	64	—	—	7
Plate Resistance (Approx.)	40000	—	18000	— ohms
Transconductance	1600	—	8400	— μ mhos
Plate Current	1.4	170*	39	— mA
Grid-No.2 Current	—	20*	3	— mA
Grid-No.1 Voltage (Approx.) for plate current of 1 mA	—	—	—24	— volts

* Triode connection, grid No.2 connected to 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.

Vertical-Deflection Oscillator and Amplifier

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

MAXIMUM RATINGS (Design-Maximum Values)

	Triode Unit Oscillator	Beam Power Unit Amplifier	
DC Plate Voltage	330	300	volts
Peak Positive-Pulse Plate Voltage# (Absolute Maximum)	—	2200†	volts
DC Grid-No.2 Voltage	—	150	volts
Peak Negative-Pulse Grid-No.1 Voltage	400	250	volts
Peak Cathode Current	77	200	mA
Average Cathode Current	22	60	mA
Plate Dissipation	1.5	12	watts
Grid-No.2 Input	—	1.9	watts

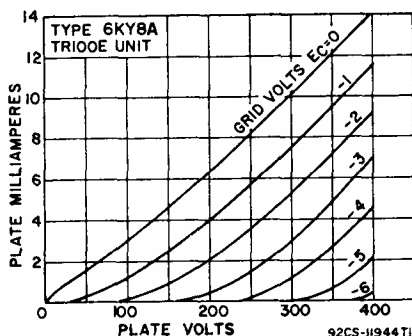
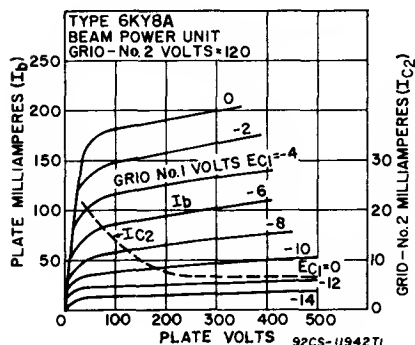
MAXIMUM CIRCUIT VALUES

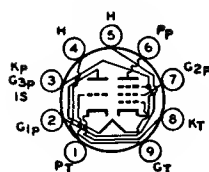
Grid-No.1-Circuit Resistance:

For grid-resistor-bias operation	2.2	2.2	megohms
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Pulse duration must not exceed 15% of a vertical scanning cycle (2.5 milliseconds).

† Under no conditions should this maximum value be exceeded.





9FZ

MEDIUM-MU TRIODE— SHARP-CUTOFF PENTODE

6KZ8

5KZ8, 9KZ8

Miniature type used as combined oscillator and mixer in vhf color and black-and-white television receivers. Outlines section, 6B; requires miniature 9-contact socket. Types 5KZ8 and 9KZ8 are identical with type 6KZ8 except for heater ratings.

	5KZ8	6KZ8	9KZ8	
Heater Voltage (ac/dc)	4.7	6.3	9.45	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	±200 max	±200 max	volts
Average value	100 max	100 max	100 max	volts

Direct Interelectrode Capacitances:*

Triode Unit:		
Grid to Plate	1.6	pF
Grid to Triode Cathode, Pentode Cathode, Heater, Pentode Grid No.3, and Heater	3.2	pF
Plate to Triode Cathode, Pentode Cathode, Heater, Pentode Grid No.3, and Heater	1.8	pF
Pentode Unit:		
Grid No.1 to Plate	0.01 max	pF
Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield	5.5	pF
Plate to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield	3.4	pF
Heater to Cathode (Each Unit)	3.2#	pF

* With external shield connected to cathode.

With external shield connected to ground.

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

	Triode Unit	Pentode Unit	
Plate Voltage	330	330	volts
Grid-No.2 (Screen-Grid) Supply Voltage	—	880	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	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 98	

CHARACTERISTICS

Plate Voltage	125	125	volts
Grid-No.2 Voltage	—	125	volts
Grid-No.1 Voltage	—1	—1	volt
Amplification Factor	46	—	
Plate Resistance (Approx.)	5400	200000	ohms
Transconductance	8500	7500	μmhos
Plate Current	18.5	12	mA
Grid-No.2 Current	—	4	mA
Grid-No.1 Voltage (Approx.) for plate current of 10 μA	—8	—8	volts

MAXIMUM CIRCUIT VALUES

Grid-No.1-Circuit Resistance:			
For fixed-bias operation	0.25	0.25	megohm
For cathode-bias operation	0.5	0.5	megohm

Refer to chart at end of section.

6L5G