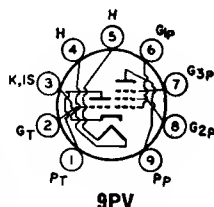


6KA8

8KA8

HIGH-MU TRIODE— SHARP-CUTOFF PENTODE

Miniature type used in color and black-and-white television receivers. The triode unit is used in sync-separator circuits; the pentode unit has two independent control grids and is used in gated-agc-amplifier and noise-inverter circuits. **Outlines section, 6E**; requires miniature 9-contact socket. For curves of average plate characteristics for triode unit, refer to type 6AW8A. Type 8KA8 is identical with type 6KA8 except for heater ratings.



	6KA8	8KA8	
Heater Voltage (ac/dc)	6.3	8.4	volts
Heater Current	0.6	0.45	ampere
Heater Warm-up Time (Average)	11	11	seconds
Heater-Cathode Voltage:			
Peak value	±200 max	±200 max	volts
Average value	100 max	100 max	volts
Direct Interelectrode Capacitances:			
Triode Unit:			
Grid to Plate	2.2		pF
Grid to Cathode, Heater, and Internal Shield	2.8		pF
Plate to Cathode, Heater, and Internal Shield	2.2		pF
Pentode Unit:			
Grid No.1 to Plate	0.1 max		pF
Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield	9.5		pF
Grid No.1 to Grid No.3	0.5		pF
Grid No.3 to Plate	2.2		pF
Grid No.3 to All Other Electrodes, Heater, and Internal Shield	7		pF

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

	Triode Unit	
Plate Voltage	300	volts
Grid Voltage:		
Positive-bias value	0	volts
Negative-bias value	50	volts
Plate Dissipation	1.1	watts

CHARACTERISTICS

	Triode Unit	Pentode Unit	
Plate Supply Voltage	200	150	volts
Grid-No.3 Supply Voltage	—	0	volts
Grid-No.2 Supply Voltage	—	100	volts
Grid-No.1 Supply Voltage	—2	0	volts
Cathode-Bias Resistor	—	180	ohms
Amplification Factor	70	—	
Plate Resistance (Approx.)	17500	100000	ohms
Transconductance, Grid No.1 to Plate	4000	4400	μmhos
Transconductance, Grid No.3 to Plate	—	600	μmhos
Plate Current	4	4	mA
Grid-No.2 Current	—	2.8	mA
Grid-No.1 Supply Voltage (Approx.):			
For plate current of 10 μA	—5	—	volts
For plate current of 20 μA	—	—4	volts
Grid No.3 Supply Voltage (Approx.) for plate current of 20 μA	—	—7	volts

MAXIMUM CIRCUIT VALUES

	Triode Unit	
Grid-Circuit Resistance:		
For fixed-bias operation	0.25	megohm
For cathode-bias operation	1	megohm

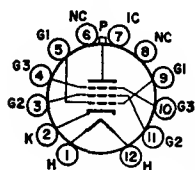
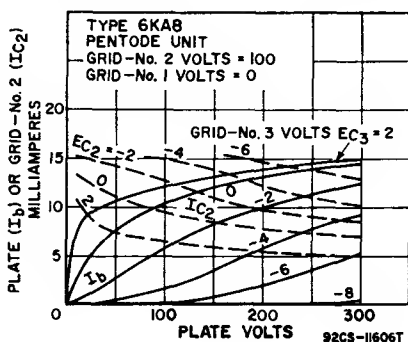
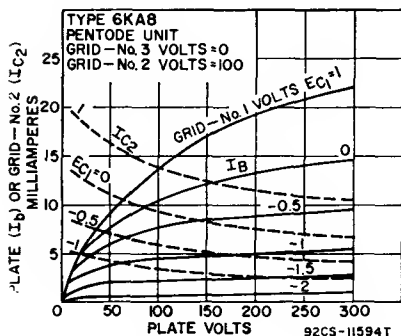
Gated AGC Amplifier and Noise Inverter

MAXIMUM RATINGS (Design-Maximum Values)

	Pentode Unit	
DC Plate Voltage	300	volts
Peak Positive-Pulse Plate Voltage#	600	volts
Grid-No.3 (Control-Grid) Voltage:		
Positive-bias value	0	volts
Negative-bias value	—100	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	volts
Negative-bias value	—50	volts

Plate Dissipation	2	watts
Grid-No.2 Input:		
For grid-No.2 voltages up to 150 volts	1.1	watts
For grid-No.2 voltages between 150 and 300 volts	See curve page 300	
MAXIMUM CIRCUIT VALUES		
Grid-No.3-Circuit Resistance	0.68	megohm
Grid-No.1-Circuit Resistance:		
For fixed-bias operation	0.5	megohm
For cathode-bias operation	1	megohm

Pulse duration must not exceed 15% of a horizontal scanning cycle (10 microseconds).



12GW

BEAM POWER TUBE

6KD6

30KD6, 36KD6/40KD6

Duodec type used as horizontal-deflection amplifier in television receivers. Outlines section, 16C; requires duodec 12-contact socket. Types 30KD6 and 36KD6/40KD6 are identical with type 6KD6 except for heater ratings.

	6KD6	30KD6	36KD6/40KD6	
Heater Voltage	6.3	30	36	volts
Heater Current	2.85	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:				
Grid No.1 to Plate			0.8	pF
Grid No.1 to Cathode, Heater, Grid No.2, and Grid No.3			40	pF
Plate to Cathode, Heater, Grid No.2, and Grid No.3			16	pF

Horizontal-Deflection Amplifier

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

MAXIMUM RATINGS (Design-Maximum Values)

DC Plate Supply Voltage	990	volts
Peak Positive-Pulse Plate Voltage#	7000	volts
Positive DC Grid-No.3 Voltage	20	volts
Grid-No.2 Voltage	200	volts
Peak Negative-Pulse Grid-No.1 Voltage	250	volts
Peak Cathode Current	1400	mA
Average Cathode Current	400	mA
Plate Dissipation*	33	watts
Grid-No.2 Input	5	watts
Bulb Temperature (At hottest point)	225	°C

Class A₁ Amplifier

CHARACTERISTICS

	Triode† Connection	Pentode Connection	
Plate Voltage	150	60 150	volts
Grid No.3 (Suppressor Grid)		Connected to cathode at socket	