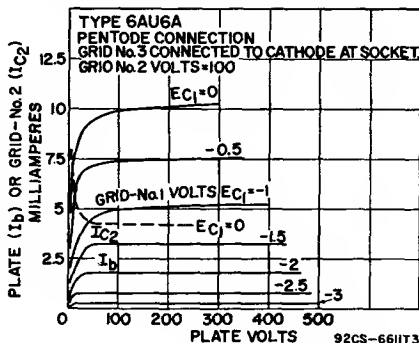


CHARACTERISTICS

	Triode† Connection	Pentode Connection				
Plate Supply Voltage	250	100	250	150		volts
Grid No.3	—	Connected to cathode at socket				volts
Grid-No.2 Supply Voltage	—	100	125	150		volts
Cathode-Bias Resistor	330	150	100	68		ohms
Amplification Factor	—	0.5	1.5	1		megohms
Plate Resistance (Approx.)	36	—	—	—		—
Transconductance	4800	3900	4500	5200		μ mhos
Plate Current	12.2	5	7.6	10.6		mA
Grid-No.2 Current	—	2.1	3	4.3		mA
Grid-No.1 Voltage for plate current of 10 μ A	—	-4.2	-5.5	-6.5		volts

† Grid No.2, grid No.3, and internal shield connected to plate.



6AU7

Refer to chart at end of section.

6AU8

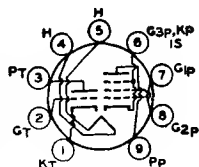
Refer to chart at end of section.

6AU8A

8AU8

MEDIUM-MU TRIODE—
SHARP-CUTOFF PENTODE

Miniature type used in television receiver applications. Pentode unit is used as video amplifier, if amplifier, and age amplifier. Triode unit is used in sync-amplifier, sync-separator, sync-clipper, and phase-inverter circuits. Outlines section, 6E; requires 9-contact socket. Type 8AU8 is identical with type 6AU8A except for heater ratings.



9DX

	6AU8A	8AU8	
Heater Voltage (ac/dc)	6.3	8.4	volts
Heater Current	0.6	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:			
Triode Unit:			
Grid to Plate		2.2	pF
Grid to Cathode and Heater		2.6	pF
Plate to Cathode and Heater		0.34	pF
Pentode Unit:			
Grid No.1 to Plate		0.06	pF
Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield		7.5	pF
Plate to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield		3.4	pF
Triode Grid to Pentode Plate		0.022 max	pF
Pentode Grid No.1 to Triode Plate		0.006 max	pF
Pentode Plate to Triode Plate		0.12 max	pF

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

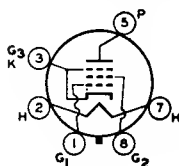
	Triode Unit	Pentode Unit	
Plate Voltage	330	330	volts
Grid-No.2 (Screen-Grid) Supply Voltage	—	330	volts
Grid-No.2 Voltage	See curve	page 98	
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0	0	volts
Plate Dissipation	2.8	3.3	watts
Grid-No.2 Input:			
For grid-No.2 voltages up to 165 volts	—	1	watt
For grid-No.2 voltages between 165 and 330 volts	See curve	page 98	

CHARACTERISTICS

Plate Supply Voltage	150	200	volts
Grid-No.2 Supply Voltage	—	125	volts
Cathode-Bias Resistor	150	82	ohms
Amplification Factor	43	—	
Plate Resistance (Approx.)	8100	10000	ohms
Transconductance	5300	8000	μmhos
Plate Current	9.5	17	mA
Grid-No.2 Current	—	3.4	mA
Grid-No.1 Voltage (Approx.) for plate current of 100 μA	—6.5	—7.5	volts

MAXIMUM CIRCUIT VALUES

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



6CK

BEAM POWER TUBE

6AV5GA

12AV5GA, 25AV5GA

Glass octal type used as horizontal-deflection amplifier in television receivers. Outlines section, 19C; requires octal socket. Types 12AV5GA and 25AV5GA are identical with type 6AV5GA except for heater ratings.

	6AV5GA	12AV5GA	25AV5GA	
Heater Voltage (ac/dc)	6.3	12.6	25	volts
Heater Current	1.2	0.6	0.3	amperes
Heater Warm-up Time (Average)	—	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			0.5	pF
Grid No.1 to Cathode, Heater, Grid No.2, and Grid No.3			14	pF
Plate to Cathode, Heater, Grid No.2, and Grid No.3			7	pF

Class A₁ Amplifier

CHARACTERISTICS

	Pentode Connection	Triode Connection	
Plate Voltage	60 250	150	volts
Grid-No.2 (Screen-Grid) Voltage	150 150	150	volts
Grid-No.1 (Control-Grid) Voltage	0 —22.5	—22.5	volts
Plate Resistance	— 14500	—	ohms
Transconductance	— 5900	—	μmhos
Plate Current	260 57	—	mA
Screen Current	26 2.1	—	mA
Grid-No.1 Voltage (Approx.) for plate current of 1 mA	— —43	—	volts
Amplification Factor	— —	4.3	

* Grid No.2 connected to plate.

Horizontal-Deflection Amplifier

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

MAXIMUM RATINGS (Design-Center Values)

DC Plate Voltage	550	volts
Peak Positive-Pulse Plate Voltage* (Absolute Maximum)	5500°	volts
Peak Negative-Pulse Plate Voltage	1250	volts
DC Grid-No.2 Voltage	175	volts
Peak Negative-Pulse Grid-No.1 Voltage	300	volts
Peak Cathode Current	400	mA
Average Cathode Current	110	mA
Grid-No.2 Input	2.5	watts
Plate Dissipation††	11	watts
Bulb Temperature (At hottest point)	210	°C