ELECTRICAL DATA

HEATER OPERATION

	3AU6	4AU6	12AU6	6AU6A
Heater Voltage	3.15	4.2	12.6	6.3 Volts
Heater Current	600	450	150	300 Ma
Heater Warm-up Time	11	11	—	11 Seconds
Maximum Heater-Cathode Voltage				
Heater Negative with Respect to Cathode				
Total DC and Peak				200 Volts
Heater Positive with Respect to Cathode				
DC				100 Volts
Total DC and Peak				200 Volts
DIRECT INTERELECTRODE CAPACITANCES (Unshielded)				
Grid to Plate (Max.)				0.0035 Pf
Input				5.5 Pf
Output				5.0 Pf
RATINGS (Design Maximum Rating System)				
Plate Voltage (Max.)				330 Volts
Grid No. 2 Supply Voltage (Max.)				330 Volts
Grid No. 2 Voltage	See Rating Chart (Gen. Info. Sec.)			
Plate Dissipation (Max.)				3.5 Watts
Grid No. 2 Dissipation (Max.)				0.75 Wtats
Positive Grid No. 1 Voltage (Max.)				0 Volt
CHARACTERISTICS AND TYPICAL OPERATION				
Plate Voltage		100	250	250 Volts
Grid No. 3 Voltage	Connected to Cathode at Socket			
Grid No. 2 Voltage		100	125	150 Volts
Cathode Bias Resistor		150	100	68 Ohms
Plate Current		5.0	7.6	10.6 Ma
Grid No. 2 Current		2.1	3.0	4.3 Ma
Transconductance		3900	4500	5200 μmhos
Plate Resistance (Approx.)		0.5	1.5	1.0 Megohm
Grid No. 1 Voltage for Ib = 10 μa		−4.2	−5.5	−6.5 Volts

Color Television Type

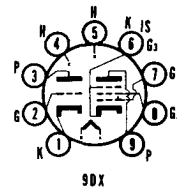
SYNC SEPARATOR (T) VIDEO AMPLIFIER (P)

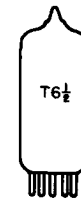
6AU8A

8AU8A

Medium Mu Triode and Sharp Cutoff Pentode

Construction ..... Miniature T-6½
Base ..... Button 9 Pin, E9-1
Basing 9DX
Outline 6-3
Maximum Diameter ..... 0.875 In.
Maximum Seated Height ..... 2.375 In.
Maximum Overall Height ..... 2.625 In.





ELECTRICAL DATA

HEATER OPERATION

	6AU8A	8AU8A
Heater Voltage	6.3	8.4 Volts
Heater Current	600	450 Ma
Heater Warm-up Time	11	11 Seconds
Maximum Heater-Cathode Voltage		
Heater Negative with Respect to Cathode		
Total DC and Peak	200	200 Volts
Heater Positive with Respect to Cathode		
DC	100	100 Volts
Total DC and Peak	200	200 Volts
DIRECT INTERELECTRODE CAPACITANCES (Unshielded)		
Triode Section		
Grid to Plate		2.2 Pf
Input		2.6 Pf
Output		0.34 Pf
Pentode Section		
Grid to Plate		0.06 Pf
Input		7.5 Pf
Output		3.4 Pf
Coupling		
Pentode Grid No. 1 to Triode Plate (Max.)		0.006 Pf
Triode Grid to Pentode Plate (Max.)		0.022 Pf
Pentode Plate to Triode Plate (Max.)		0.12 Pf

RATINGS (Design Center Rating System)

	Triode Section	Pentode Section
Plate Voltage (Max.)	330	330 Volts
Grid No. 2 Supply Voltage (Max.)	—	330 Volts
Grid No. 2 Voltage (Max.)	See Rating Chart (Gen. Info. Sec.)	
Plate Dissipation (Max.)	2.8	3.3 Watts
Grid No. 2 Dissipation (Max.)	—	1.0 Watt
Positive Grid No. 1 Voltage (Max.)	0	0 Volt
Grid No. 1 Circuit Resistance		
Fixed Bias (Max.)	0.5	0.25 Megohm
Self Bias (Max.)	1.0	1.0 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

	Triode Section	Pentode Section
Class A1 Amplifier		
Plate Voltage	150	200 Volts
Grid No. 2 Voltage	—	125 Volts
Cathode Bias Resistor	150	82 Ohms
Plate Current	9.5	17 Ma
Grid No. 2 Current	—	3.4 Ma
Transconductance	5300	8000 μmhos
Amplification Factor	43	—
Plate Resistance (Approx.)	8100	100,000 Ohms
Grid No. 1 Voltage (Approx.) for Ib = 100 ma	–6.5	–7.5 Volts dc

6AV5GA

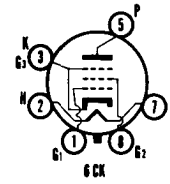
12AV5GA, 17AV5GA, 25AV5GA

Color Television Type

HORIZONTAL DEFLECTION AMPLIFIER

Beam Power Pentode

Construction .....Octal T-11 or T-12
Base.....Octal 6 Pin, B6-112 or B6-120
Basing 6CK
Outline
Maximum Diameter .....1.563 In.
Maximum Seated Height .....3.688 In.
Maximum Overall Height .....4.250 In.



ELECTRICAL DATA

HEATER OPERATION

	25AV5GA	17AV5GA	12AV5GA	6AV5GA
Heater Voltage	25	16.8	12.6	6.3 Volts
Heater Current	300	450	600	1200 Ma
Heater Warm-up Time	—	11	11	— Seconds

Maximum Heater-Cathode Voltage
Heater Negative with Respect to Cathode
Total DC and Peak..... 200 Volts
Heater Positive with Respect to Cathode
DC ..... 100 Volts
Total DC and Peak..... 200 Volts

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

Grid to Plate ..... 0.5 Pf
Input ..... 14 Pf
Output ..... 7.0 Pf

RATINGS (Design Center Rating System)

Horizontal Deflection Amplifier(1)

DC Plate Supply Voltage (Boost + DC Power Supply) (Max.) ..... 550 Volts
Peak Positive Plate Voltage (Abs. Max.) ..... 5500 Volts
Peak Negative Plate Voltage (Max.) ..... 1250 Volts
DC Grid No. 2 Voltage (Max.) ..... 175 Volts
Peak Negative Grid No. 1 Voltage (Max.) ..... 300 Volts
Plate Dissipation (Max.)(2) ..... 11 Watts
Grid No. 2 Dissipation (Max.) ..... 2.5 Watts
Average Cathode Current (Max.)..... 110 Ma
Peak Cathode Current (Max.) ..... 400 Ma
Grid No. 1 Circuit Resistance (Max.) ..... 0.47 Megohm
Bulb Temperature (At Hottest Point) (Max.) ..... 210 °C

CHARACTERISTICS AND TYPICAL OPERATION

Plate Voltage ..... 250 Volts