RATINGS (Design Center Rating System)
Damper Service[2]

Peak Inverse Plate Voltage (Abs. Max.)[1]	6000 Volts
Plate Dissipation	2.7 Watts
Steady State Peak Plate Current	800 Ma
DC Output Current	135 Ma

CHARACTERISTICS AND TYPICAL OPERATION

Tube Voltage Drop Ib = 250 Ma DC	19 Volts

NOTES:
(1) Should not be exceeded under any condition of high line voltage or misadjustment.
(2) For operation in a 525 line, 30 frame system as described in "Standards of Good Engineering Practice for Television Broadcast Stations; Federal Communications Commission," the duty cycle of the voltage pulse must not exceed 15% of one horizontal scanning cycle.

6V6GTA

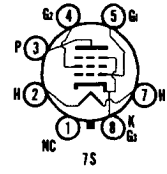
5V6GT, 12V6GT

Color Television Type

AUDIO POWER AMPLIFIER or VERTICAL DEFLECTION AMPLIFIER

Beam Power Pentode

Construction .....Octal T-9
Base .....Octal 6 or 7 Pin, B6-81
B6-84, B7-7 or B7-59
Basing.....7S
Outline .....9-11 or 9-41
Maximum Diameter .....1.188 In.
Maximum Seated Height .....2.750 In.
Maximum Overall Height .....3.312 In.



ELECTRICAL DATA
HEATER OPERATION

	12V6GT	5V6GT	6V6GTA
Heater Voltage	12.6	4.7	6.3 Volts
Heater Current	225	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 Volts
Heater Positive with Respect to Cathode			
DC			100 Volts
Total DC and Peak			200 Volts

DIRECT INTERELECTRODE CAPACITANCES

Grid No. 1 to Plate	0.7 Pf
Input: g1 to (h + k + g2 + g3)	9.0 Pf
Output: p to (h + k + g2 + g3)	7.5 Pf

RATINGS (Design Maximum Rating System)
Class A1 Amplifier

Plate Voltage (Max.)	350 Volts
Grid No. 2 Voltage (Max.)	315 Volts
Plate Dissipation (Max.)	14 Watts
Grid No. 2 Dissipation (Max.)	2.2 Watts
Grid No. 1 Circuit Resistance	
Fixed Bias (Max.)	0.1 Megohm
Cathode Bias (Max.)	0.5 Megohm

Vertical Deflection Amplifier[1]**—Triode Connected**

Plate Voltage (Max.)	350 Volts
Peak Positive Plate Voltage (Abs. Max.)	1200 Volts
Plate Dissipation[2]	10 Watts
Peak Negative Grid Voltage	275 Volts
Average Cathode Current	40 Ma
Peak Cathode Current	115 Ma
Grid No. 1 Circuit Resistance (Cathode Bias) (Max.)	2.2 Megohms

CHARACTERISTICS AND TYPICAL OPERATION
Class A1 Amplifier (Single Tube)

	Triode Conn.		Pentode Conn.	
Plate Voltage	250	180	250	315 Volts
Grid No. 2 Voltage	—	180	250	225 Volts
Grid No. 1 Voltage	-12.5	-8.5	-12.5	-13.0 Volts
Peak AF Grid No. 1 Voltage	—	8.5	12.5	13.0 Volts
Zero Signal Plate Current	49.5	29	45	34 Ma

Maximum Signal Plate Current	—	30	47	35 Ma
Zero Signal Grid No. 2 Current	—	3	4.5	2.2 Ma
Maximum Signal Grid No. 2 Current	—	4	7.0	6 Ma
Transconductance	5000	3700	4100	3750 μmhos
Amplification Factor	9.8	—	—	—
Plate Resistance (Approx.)	1960	50,000	50,000	80,000 Ohms
Load Resistance	—	5500	5000	8500 Ohms
Maximum Signal Power Output	—	2.0	4.5	5.5 Watts
Total Harmonic Distortion (Approx.)	—	8	8	12 Percent
Ec1 for Ib = 0.5 Ma (Approx.)	–36	—	—	— Volts

NOTES:

(1) For operation in a 525 line, 30 frame system as described in "Standards of Good Engineering Practice for Television Broadcast Stations; Federal Communications Commission," the duty cycle of the voltage pulse must not exceed 15% of one horizontal scanning cycle.

(2) In stages operating with grid leak bias, an adequate cathode bias resistor or other suitable means is required to protect the tube in the absence of excitation.

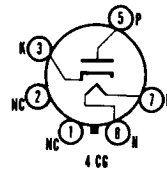
DAMPER

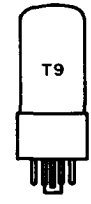
6W4GT

25W4GT

Heater-Cathode Diode

Construction .....Octal T-9
Base .....Octal 5 or 6 Pin, B5-82
B5-85, B6-8 or B6-60
Basing(1) 4CG
Outline .....9-11 or 9-41
Maximum Diameter .....1.188 In.
Maximum Seated Height .....2.750 In.
Maximum Overall Height .....3.312 In.





ELECTRICAL DATA

HEATER OPERATION

	25W4GT	6W4GT
Heater Voltage	25	6.3 Volts
Heater Current	300	1200 Ma
Maximum Heater-Cathode Voltage		
Heater Negative with Respect to Cathode		
DC (Abs. Max.)	500	500 Volts
Total DC and Peak (Abs. Max.)	2300	— Volts
Heater Positive with Respect to Cathode		
DC	100	100 Volts
Total DC and Peak	300	200 Volts

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

	6W4GT	25W4GT
Heater to Cathode	7.0	11 Pf
Plate to Cathode and Heater	6.0	6.0 Pf
Cathode to Plate and Heater	13	17 Pf

RATINGS (Design Center Rating System)

Damper Service(2)

Peak Inverse Plate Voltage (Abs. Max.)	3850 Volts
Plate Dissipation (Max.)	3.5 Watts
Steady State Peak Current (Max.)	750 Ma
DC Plate Current (Max.)	125 Ma

CHARACTERISTICS AND TYPICAL OPERATION

Tube Voltage Drop for Ib = 250 Ma	21 Volts

NOTES:

(1) Pins 1, 2, 4, and 6 should not be used as tie points. Pin 1 omitted on bases B5-82 and B5-85.

(2) For operation in a 525 line, 30 frame system as described in "Standards of Good Engineering Practice for Television Broadcast Stations; Federal Communications Commission," the duty cycle of the voltage pulse must not exceed 15% of one horizontal scanning cycle.