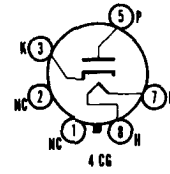
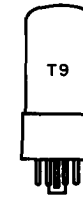
6W4GTA

DAMPER

Heater Cathode Diode

Construction .....Octal T-9
Base .....Octal 5 Pin, B5-82
Basing 4CG
Outline 9-11
Maximum Diameter .....1.188 In.
Maximum Seated Height .....2.750 In.
Maximum Overall Height .....3.312 In.





ELECTRICAL DATA

HEATER OPERATION

Heater Voltage	6.3 Volts
Heater Current	1200 Ma
Maximum Heater-Cathode Voltage	
Heater Negative with Respect to Cathode	
DC	800 Volts
Total DC and Peak	3950 Volts
Heater Positive with Respect to Cathode	
DC	100 Volts
Total DC and Peak	300 Volts
DIRECT INTERELECTRODE CAPACITANCES (Unshielded)	
Cathode to Plate and Heater	8.0 Pf
Plate to Cathode and Heater	6.0 Pf
Heater to Cathode	3.0 Pf
RATINGS (Design Maximum Rating System)	
Damper Service(1)	
Peak Inverse Plate Voltage (Abs. Max.)	3950 Volts
Plate Dissipation (Max.)	4.0 Watts
Steady State Peak Current (Max.)	840 Ma
DC Plate Current (Max.)	140 Ma
CHARACTERISTICS AND TYPICAL OPERATION	
Tube Voltage Drop for Ib = 250 Ma	21 Volts

NOTE:

(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.

6W6GT

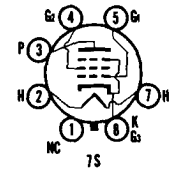
12W6GT, 17W6GT, 25W6GT

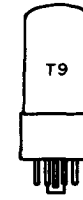
Color Television Type

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

	25W6GT	17W6GT	12W6GT	6W6GT
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

Grid to Plate	0.8 Pf
Input	15 Pf
Output	9.0 Pf

RATINGS (Design Maximum Rating System)

Class A1 Amplifier

Plate Voltage (Max.)	330 Volts
Grid No. 2 Voltage (Max.)	165 Volts
Plate Dissipation (Max.)	12 Watts
Grid No. 2 Dissipation (Max.)	1.35 Watts
Grid No. 1 Circuit Resistance	
Fixed Bias (Max.)	0.1 Megohm
Cathode Bias (Max.)	0.5 Megohm

Vertical Deflection Amplifier—Triode Connected(1)

DC Plate Voltage (Max.)	330 Volts
Peak Positive Plate Voltage (Abs. Max.)	1200 Volts
Plate Dissipation (Max.)	8.5 Watts
Peak Negative Grid Voltage (Max.)	275 Volts
Average Cathode Current (Max.)	65 Ma
Peak Cathode Current (Max.)	195 Ma
Grid No. 1 Circuit Resistance Cathode Bias (Max.)	2.2 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

Class A1 Amplifier

Plate Voltage	110	200 Volts
Grid No. 2 Voltage	110	125 Volts
Grid No. 1 Voltage	-7.5	— Volts
Cathode Bias Resistor	—	180 Ohms
Peak AF Grid No. 1 Voltage	7.5	8.5 Volts
Plate Current (Zero-Signal)	49	46 Ma
Plate Current (Maximum Signal)	50	47 Ma
Grid No. 2 Current (Zero Signal)	4.0	2.2 Ma
Grid No. 2 Current (Maximum Signal)	10	8.5 Ma
Plate Resistance (Approx.)	13,000	28,000 Ohms
Transconductance	8000	8000 μmhos
Load Resistance	2000	4000 Ohms
Maximum Signal Power Output	2.1	3.8 Watts
Total Harmonic Distortion (Approx.)	10	10 Percent

Triode Connected

Plate Voltage	225 Volts
Grid No. 1 Voltage	-30 Volts
Plate Current	22 Ma
Transconductance	3800 μmhos
Amplification Factor	6.2
Plate Resistance	1600 Ohms
Grid No. 1 Voltage (Approx.) for Ib = 0.5 Ma	-42 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.

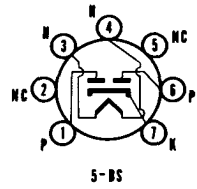
FULL-WAVE POWER RECTIFIER

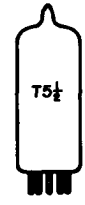
6X4

12X4

Heater-Cathode Twin Diode

Construction	Miniature T-5½
Base	Button 7 Pin, E7-1
Basing	5BS
Outline	5-3
Maximum Diameter	0.750 In.
Maximum Seated Height	2.375 In.
Maximum Overall Height	2.625 In.





ELECTRICAL DATA

HEATER OPERATION

	12X4	6X4
Heater Voltage	12.6	6.3 Volts
Heater Current	300	600 Ma