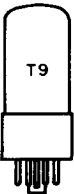
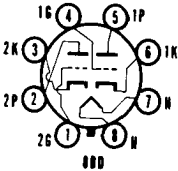


VERTICAL DEFLECTION
OSCILLATOR and AMPLIFIER

6DN7

Double Dissimilar Triode

Construction Octal T-9
Base Octal 8 Pin, B8-142
Basing 8BD
Outline
Maximum Diameter 1.188 In.
Maximum Seated Height 2.438 In.
Maximum Overall Height 3.000 In.



ELECTRICAL DATA

HEATER OPERATION

Heater Voltage.....	6.3 Volts
Heater Current	900 Ma
Maximum Heater-Cathode Voltage	
Heater Positive with Respect to Cathode	
DC Component	100 Volts
Total DC and Peak.....	200 Volts
Heater Negative with Respect to Cathode	
Total DC and Peak.....	200 Volts

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

	Section 1	Section 2
Grid to Plate	4.0	5.5 Pf
Input	2.2	4.6 Pf
Output	0.7	1.0 Pf

RATINGS (Design Maximum Rating System)

	Vertical Oscillator Service (Section 1) ⁽¹⁾	Vertical Deflection Service (Section 2) ⁽¹⁾
DC Plate Voltage (Max.)	350	550 Volts
Peak Positive Pulse Plate Voltage (Max.)	—	2500 Volts
Peak Negative Grid Voltage (Max.)	400	250 Volts
Plate Dissipation (Max.)	1.0	10 ⁽²⁾ Watts
DC Cathode Current (Max.)	—	50 Ma
Peak Cathode Current (Max.).....	—	150 Ma
Grid Circuit Resistance		
With Fixed Bias (Max.)	2.2	2.2 Megohms
With Cathode Bias (Max.)	2.2	— Megohms

CHARACTERISTICS AND TYPICAL OPERATION

	Section 1 (Oscillator)	Section 2 (Amplifier)
Plate Voltage	250	150 250 Volts
Grid Voltage	-8.0	0 ⁽³⁾ -9.5 Volts
Amplification Factor	22.5	— 15.4
Plate Resistance (Approx.)	9000	— 2000 Ohms
Transconductance	2500	— 7700 μ mhos
Plate Current	8.0	68 41 Ma
Grid Voltage (Approx.)		
Ib = 10 μ a.....	-18	— -22 Volts
Ib = 50 μ a.....	—	— -23 Volts

NOTES:

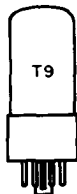
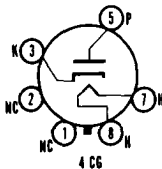
- (1) For operation in a 525 line, 30 frame system as described in "Standards of Good Engineering Practice for Television Broadcast Stations; Federal Communications Commission," the duty cycle of the voltage pulse must not exceed 15% of one horizontal scanning cycle.
- (2) In stages operating with grid-leak bias, an adequate cathode-bias resistor or other suitable means is required to protect the tube in the absence of excitation.
- (3) Applied for short interval (two seconds maximum) so as not to damage tube.

6DQ4

12DQ4, 17DQ4

DAMPER**Heater-Cathode Diode**

Construction Octal T-9
 Base Octal 5 Pin
 Basing 4CG
 Outline 9-15
 Maximum Diameter 1.188 In.
 Maximum Seated Height 2.875 In.
 Maximum Overall Height 3.438 In.

**ELECTRICAL DATA
HEATER OPERATION**

	17DQ4	12DQ4	6DQ4
Heater Voltage.....	16.8	12.6	6.3 Volts
Heater Current	450	600	1200 Ma
Heater Warm-up Time	11	11	— Seconds
Maximum Heater-Cathode Voltage			
Heater Negative with Respect to Cathode			
DC			900 Volts
Total DC and Peak.....			5500 Volts
Heater Positive with Respect to Cathode			
DC			100 Volts
Total DC and Peak.....			300 Volts

DIRECT INTERELECTRODE CAPACITANCES

Heater to Cathode	4.0 Pf
Plate to Cathode and Heater.....	5.0 Pf
Cathode to Plate and Heater.....	8.5 Pf

RATINGS (Design Maximum Rating System)

Peak Inverse Plate Voltage (Max.)	5500 Volts
Steady State Peak Plate Current (Max.)	1000 Ma
DC Output Current (Max.)	175 Ma
Plate Dissipation (Max.)	6.0 Watts

CHARACTERISTICS AND TYPICAL OPERATION

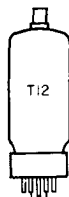
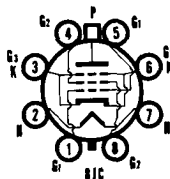
Tube Voltage Drop for $I_b = 250$ Ma	32 Volts
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6DQ5

Color Television Type

**HORIZONTAL
DEFLECTION AMPLIFIER****Beam Power Pentode**

Construction Octal T-12
 Base Octal 8 Pin, B8-118
 Top Cap C1-1
 Basing 8JC
 Outline 12-21
 Maximum Diameter 1.563 In.
 Maximum Seated Height 4.250 In.
 Maximum Overall Height 5.000 In.

**ELECTRICAL DATA****HEATER OPERATION**

Heater Voltage.....	6.3 Volts
Heater Current	2500 Ma
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 No. 1 to Plate	0.5 Pf
Input	23 Pf
Output	11 Pf