

Screen Voltage (Max.)	220 Volts
Negative DC Grid No. 1 Voltage (Max.)	55 Volts
Peak Negative Grid No. 1 Voltage (Max.)	330 Volts
Plate Dissipation (Max.) ⁽²⁾	18 Watts
Screen Dissipation (Max.)	3.5 Watts
DC Cathode Current (Max.)	230 Ma
Peak Cathode Current (Max.)	800 Ma
Grid No. 1 Circuit Resistance (Max.)	1.0 Megohm
Bulb Temperature at Hottest Point (Max.)	220 °C

CHARACTERISTICS AND TYPICAL OPERATION

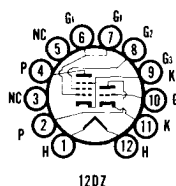
Plate Voltage	5000	50	130 Volts
Beam Plates	Connected to Cathode at Socket		
Screen Voltage	130	130	130 Volts
Grid No. 1 Voltage	—	0 ⁽³⁾	-20 Volts
Plate Resistance (Approx.)	—	—	9900 Ohms
Transconductance	—	—	9000 μ mhos
Plate Current	—	450	46 Ma
Screen Current	—	29	1.8 Ma
Grid No. 1 Voltage (Approx.) Ib = 1.0 Ma	-64	—	-32 Volts
Triode Amplification Factor ⁽⁴⁾	—	—	4.8

NOTES:

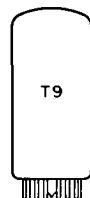
- (1) For operation in a 525 line, 30 frame system as described in "Standards of Good Engineering Practice for Television Broadcast Stations; Federal Communications Commission," the duty cycle of the voltage pulse must not exceed 15% of one horizontal scanning cycle.
- (2) In stages operating with grid-leak bias, an adequate cathode bias resistor of 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.
- (4) Triode connection (screen tied to plate) with $E_b = E_{c2} = 130$ V and $E_{c1} = -20$ V.

6JZ813JZ8, 17JZ8,
24JZ8, 25JZ8**VERTICAL DEFLECTION
OSCILLATOR and AMPLIFIER****Medium Mu Triode and
Sharp Cutoff Pentode**

Construction	Compactron T-9
Base	Butt-on 12 Pin, E12-70
Basing	12DZ
Outline	9-58
Maximum Diameter	1.188 in.
Maximum Seated Height	2.000 in.
Maximum Overall Height	2.375 in.



12DZ

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

	25JZ8	24JZ8	13JZ8	17JZ8	6JZ8
Heater Voltage	25.2	24.2	12.7	17.5	6.3
Heater Current	300	315	600	450	1200 Ma
Heater Warm-up Time	11	11	11	11	— Seconds
Maximum Heater-Cathode Voltage					
Heater Negative with Respect to Cathode					
Total DC and Peak					
Heater Positive with Respect to Cathode					
DC					
Total DC and Peak					

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)**Triode Section**

Grid to Plate	3.6 Pf
Input: g to (h + Tk)	2.2 Pf
Output: p to (h + Tk)	0.7 Pf

Pentode Section

Grid No. 1 to Plate (Max.)	0.34 Pf
Input: g1 to (h + Pk + Pp + g2)	11 Pf
Output: p to (h + Pk + Pp + g2)	7 Pf

RATINGS (Design Maximum Rating System)
Vertical Deflection Oscillator and Amplifier⁽¹⁾

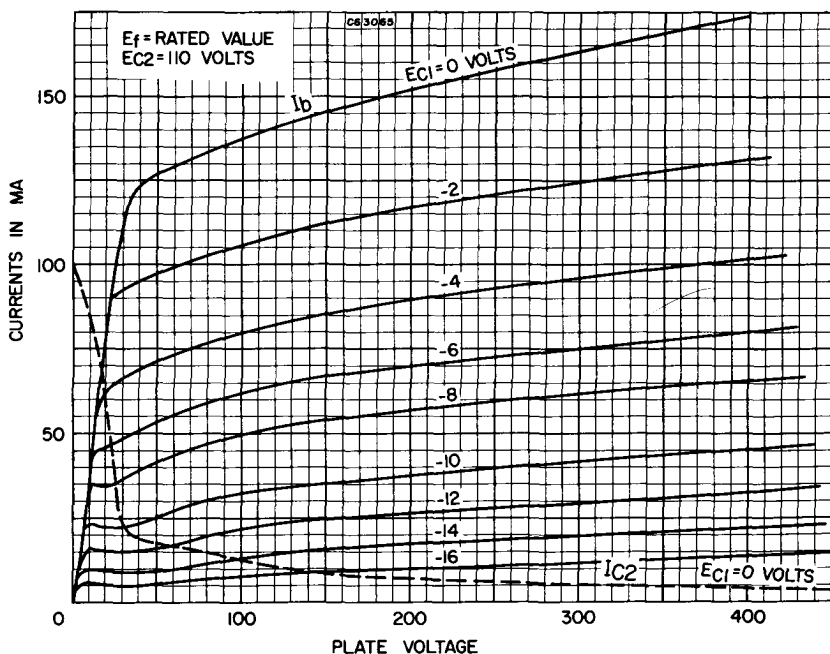
	Tri. Osc.	Pent. Amp.
Plate Voltage (Max.)	250	250 Volts
Grid No. 2 Voltage (Max.)	—	200 Volts
Peak Positive Pulse Plate Voltage (Max.)	—	2000 Volts
Peak Negative Grid No. 1 Voltage (Max.)	400	150 Volts
Plate Dissipation (Max.)	1.0	7 Watts
Grid No. 2 Dissipation (Max.) ⁽²⁾	—	1.8 Watts
Average Cathode Current (Max.)	20	70 Ma
Peak Cathode Current (Max.)	70	245 Ma
Grid Circuit Resistance		
Self Bias (Max.)	2.2	2.2 Megohms
Fixed Bias (Max.)	1.0	1.0 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

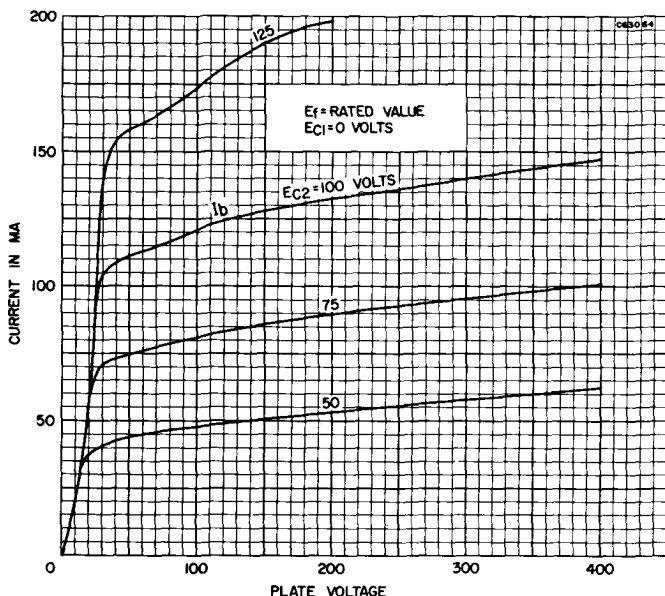
	Triode Section	Pentode Section
Plate Voltage	150	120 Volts
Grid No. 2 Voltage	—	110 Volts
Grid No. 1 Voltage	-5	-8 Volts
Plate Current	5.5	46 Ma
Grid No. 2 Current	—	3.5 Ma
Transconductance	2350	7100 μ mhos
Amplification Factor	20	—
Plate Resistance (Approx.)	8500	11,700 Ohms
E_c for $I_b = 10 \mu a$ (Approx.)	-11	— Volts
E_c for $I_b = 100 \mu a$ (Approx.)	—	-25 Volts

INSTANTANEOUS PLATE KNEE VALUES
 $E_b = 45 \text{ V}$; $E_{c2} = 110 \text{ V}$; and $E_c = 0 \text{ V}$
 $I_b = 122 \text{ Ma}$, and $I_{c2} = 16.5 \text{ Ma}$
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 bias resistor or other suitable means is required to protect the tube in the absence of excitation.

AVERAGE PLATE CHARACTERISTICS
(Pentode Section)


AVERAGE PLATE CHARACTERISTICS (Triode Section)

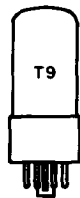
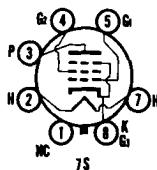


6K6GT

AUDIO POWER AMPLIFIER

Power Pentode

Construction Octal T-9
Base Octal 6 or 7 Pin
Basing 7S
Outline 9-11 or 9-41
Maximum Diameter 1.188 In.
Maximum Seated Height 2.750 In.
Maximum Overall Height 3.313 In.



ELECTRICAL DATA HEATER OPERATION

Heater Voltage.....	6.3 Volts
Heater Current	400 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)

Control Grid to Plate.....	0.5 Pf
Input	5.5 Pf
Output	6.0 Pf

RATINGS (Design Center Rating System)

Plate Voltage (Max.)	315 Volts
Plate Dissipation (Max.)	8.5 Watts
Screen Voltage (Max.)	285 Volts
Screen Dissipation (Max.)	2.8 Watts
Positive Control Grid Voltage (Max.)	0 Volt