

Pentode Section

Grid No. 1 to Plate (Max.)	0.08 Pf
Input: g_1 to $(h + k + g_2 + g_3 + IS)$	8 Pf
Output: p to $(h + k + g_2 + g_3 + IS)$	3.2 Pf

Coupling

Pentode Grid No. 1 to Triode Plate (Max.)	0.012 Pf
Pentode Plate to Triode Plate (Max.)	0.24 Pf

RATINGS (Design Maximum Rating System)

	Triode Section	Pentode Section
Plate Voltage (Max.)	300	330 Volts
Grid No. 2 Supply Voltage (Max.)	—	330 Volts
Grid No. 2 Voltage	See Rating Chart (Gen. Info. Sec.)	
Plate Dissipation (Max.)	1.1	4 Watts
Grid No. 2 Dissipation (Max.)	—	1.7 Watts
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	200	200 125 Volts
Grid No. 2 Voltage	—	200 125 Volts
Grid No. 1 Voltage	-2	-2.9 -1 Volts
Plate Current	4	22 22 Ma
Grid No. 2 Current	—	4.0 4 Ma
Transconductance	4000	10,700 11,500 μ mhos
Amplification Factor	70	—
Plate Resistance (Approx.)	17,500	150,000 100,000 Ohms
E_{c1} for $I_b = 20 \mu a$ (Approx.)	-5	-9 -5.5 Volts

INSTANTANEOUS PLATE KNEE CHARACTERISTICS

Eb = 60 V; Ec2 = 200 V and Ec1 = 0 V

Ib = 51 Ma (Approx.) and Ic2 = 14 Ma (Approx.)

6JW8/ECF802

9JW8

Color Television Type

**HORIZONTAL OSCILLATOR (P)
REACTANCE TUBE (T)****Triode and Pentode**

Construction	Miniature T-6½
Base	Button 9 Pin, E9-1
Basing	9DC
Outline	6-2
Maximum Diameter	0.875 In.
Maximum Seated Height	1.937 In.
Maximum Overall Height	2.187 In.

**ELECTRICAL DATA
HEATER OPERATION**

	9JW8	6JW8/ECF802
Heater Voltage	9.3	6.3 Volts
Heater Current	450	430 Ma
Maximum Heater-Cathode Voltage	100	100 Volts

DIRECT INTERELECTRODE CAPACITANCES**Pentode Section**

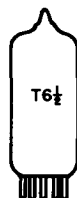
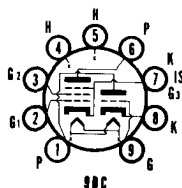
Grid No. 1	5.4 Pf
Plate to Grid No. 1	0.060 Pf
Grid No. 1 to Filament	0.1 Pf

Triode Section

Grid	2.4 Pf
Plate to Grid	1.5 Pf
Grid to Filament	0.1 Pf

RATINGS (Design Center Rating System)**Pentode Section**

Plate Voltage, Zero Plate Current (Max.)	550 Volts
Plate Voltage (Max.)	250 Volts
Plate Dissipation (Max.)	1.2 Watts
Grid No. 2 Voltage, Zero Plate Current (Max.)	550 Volts
Grid No. 2 Voltage (Max.)	250 Volts
Grid No. 2 Dissipation (Max.)	0.8 Watt



Grid No. 1 Circuit Resistance (Fixed Bias) (Max.)	0.56 Megohm
Grid No. 1 Circuit Resistance (Self Bias) (Max.)	1.0 Megohm
Cathode Current (Max.)	15 Ma
Peak Cathode Current (Max.) ⁽¹⁾	50 Ma
Input Impedance at 60 Hertz (Max.)	300 K Ohms
Triode Section	
Plate Voltage, Zero Plate Current (Max.)	550 Volts
Plate Voltage (Max.)	250 Volts
Plate Dissipation (Max.)	1.4 Watts
Grid No. 1 Circuit Resistance (Max.)	3 Megohms
Cathode Current (Max.)	10 Ma
Input Impedance at 60 Hertz (Max.)	50 K Ohms

CHARACTERISTICS AND TYPICAL OPERATION**Pentode Section**

Plate Voltage	100 Volts
Grid No. 2 Voltage	100 Volts
Grid No. 1 Voltage	-1 Volt
Plate Current	6 Ma
Grid No. 2 Current	1.7 Ma
Transconductance	5500 μ mhos
Input Resistance	0.4 Megohm
Amplification Factor (Grid No. 1 to Grid No. 2)	47
Plate Current ($E_{g1} = 0$ V)	12.5 Ma
Grid No. 2 Current ($E_{g1} = 0$ V)	3.5 Ma
Grid No. 1 Voltage ($E_b = E_{g2} = 200$ V, $I_b = 10$ μ a)	-16 Volts
Grid No. 1 Voltage ($I_{c1} = +0.3$ μ a)	-1.3 Volts

Triode Section

Plate Voltage	200 Volts
Grid Voltage	-2 Volts
Plate Current	3.5 Ma
Transconductance	3500 μ mhos
Input Resistance	20 K Ohms
Amplification Factor	70
Plate Current ($I_c = 10$ μ a)	10 Ma
Grid Voltage ($I_c = +0.3$ μ a)	-1.3 Volts

NOTE:(1) Duty cycle 30% maximum; pulse time 30 μ sec. maximum.

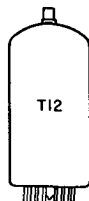
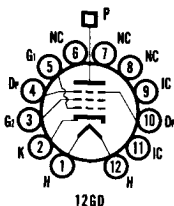
HORIZONTAL DEFLECTION AMPLIFIER

6JZ6

21JZ6

Beam Power Pentode

Construction	Compactron T-12
Base	Button 12 Pin, E12-74
Top Cap	C1-3
Basing	12GD
Outline	12-79
Maximum Diameter	1.563 In.
Maximum Seated Height	3.250 In.
Maximum Overall Height	3.625 In.

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

Heater Voltage	21.0	6JZ6 6.3 Volts
Heater Current	450	1500 Ma
Heater Warm-up Time	11	— Sec.
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	0.34 Pf
Input: g_1 to ($h + k + g_2 + b.p.$)	24 Pf
Output: p to ($h + k + g_2 + b.p.$)	8.5 Pf

RATINGS (Design Maximum Rating System)**Horizontal Deflection Amplifier Service⁽¹⁾**

DC Plate Supply Voltage (Boost + DC Power Supply) (Max.)	770 Volts
Peak Positive Pulse Plate Voltage (Max.)	6500 Volts
Peak Negative Pulse Plate Voltage (Max.)	1500 Volts
Positive DC Beam Plate Voltage (Max.)	70 Volts