

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 to Plate 0.26 Pf

Input: g_1 to $(k + g_3 + g_2 + h)$ 15 Pf

Output: p to $(k + g_3 + g_2 + h)$ 6.5 Pf

RATINGS (Design Maximum Rating System)

Horizontal Deflection Amplifier⁽¹⁾

DC Plate Supply Voltage (Boost + DC Power Supply) (Max.) 770 Volts

Peak Positive Plate Voltage (Max.) 6500 Volts

Peak Negative Plate Voltage (Max.) 1500 Volts

Grid No. 2 Voltage (Max.) 220 Volts

Negative Grid No. 1 Voltage (Max.) -55 Volts

Peak Negative Grid No. 1 Voltage (Max.) 330 Volts

Plate Dissipation (Max.)⁽²⁾ 17.5 Watts

Grid No. 2 Input (Max.) 3.5 Watts

Average Cathode Current (Max.) 175 Ma

Peak Cathode Current (Max.) 550 Ma

Grid No. 1 Circuit Resistance (Max.) 1.0 Megohm

Bulb Temperature (At Hottest Point) (Max.) 240 °C

CHARACTERISTICS AND TYPICAL OPERATION

Plate Voltage 250 Volts

Grid No. 2 Voltage 150 Volts

Grid No. 1 Voltage -22.5 Volts

Plate Current 70 Ma

Grid No. 2 Current 2.1 Ma

Transconductance 7100 μ mhos

Amplification Factor⁽³⁾ 4.4

Plate Resistance 15,000 Ohms

E_{c1} for $I_b = 1$ Ma (Approx.) -42 Volts

INSTANTANEOUS PLATE KNEE VALUES

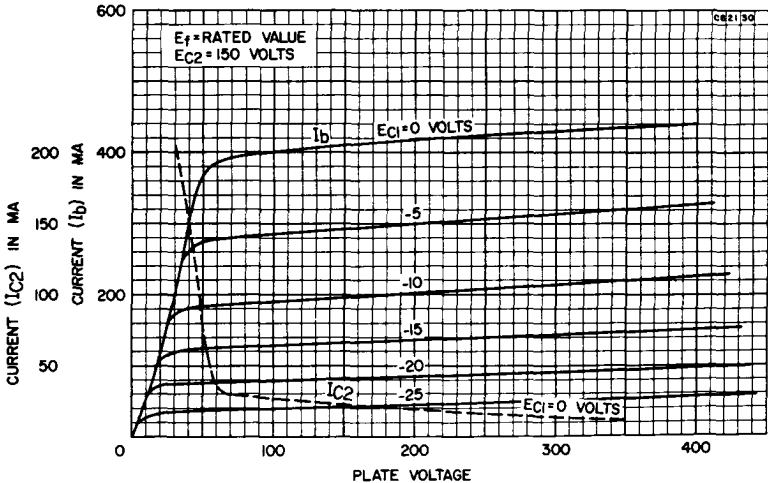
$E_b = 60$ V, $E_{c2} = 150$ V and $E_{c1} = 0$ V;

$I_b = 390$ Ma; and $I_{c2} = 32$ 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 cathode bias resistor or other suitable means is required to protect the tube in the absence of excitation.
- (3) Amplification factor with tube operating as a triode with 150 volts on the plate and Grid No. 2 and -22.5 volts on Grid No. 1.

AVERAGE PLATE CHARACTERISTICS



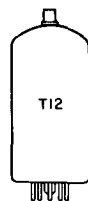
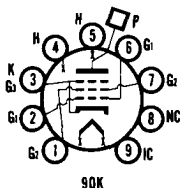
6GJ5A

12GJ5A, 17GJ5A

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

Construction Novar T-12
 Base Novar Button 9 Pin, E9-88
 (Exhaust Tip on Base)
 Top Cap C1-2, C1-3 or C1-33
 Basing 9QK
 Outline

Maximum Diameter 1.562 In.
 Maximum Seated Height 3.125 In.
 Maximum Overall Height 3.505 In.
 The 6GJ5A, 12GJ5A, and 17GJ5A are identical to the 6GJ5, 12GJ5, and 17GJ5 except for base with exhaust tip at bottom and shorter bulb.

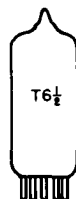
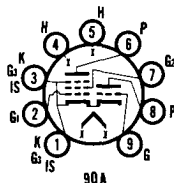
**6GJ7/ECF801**

4GJ7, 5GJ7, 8GJ7/PCF801

Color Television Type

VHF OSCILLATOR and MIXER**Triode and Pentode**

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

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

	4GJ7	5GJ7	8GJ7/PCF801	6GJ7/ECF801
Heater Voltage.....	4.1	5.6	8.0	6.3 Volts
Heater Current.....	600	450	300	410 Ma
Maximum Heater-Cathode Voltage				
Heater Positive with Respect to Cathode				
Total DC and Peak.....				110 Volts
Heater Positive with Respect to Cathode				
Total DC and Peak.....				110 Volts

DIRECT INTERELECTRODE CAPACITANCES**Triode Section**

Plate to Grid	1.8 Pf
Grid to Cathode and Heater	3.3 Pf
Plate to All Except Grid	1.7 Pf

Pentode Section (Shielded)

Input	6.2 Pf
Output	3.5 Pf
Plate to Grid No. 1	0.009 Pf
Grid No. 1 to Grid No. 2	1.5 Pf

Coupling

Triode Plate to Pentode Plate (Max.)	0.025 Pf
Pentode Plate to Triode Grid (Max.)	0.01 Pf
Triode Plate to Pentode Grid No. 1 (Max.)	0.01 Pf
Triode Grid to Pentode Grid No. 1 (Max.)	0.01 Pf

RATINGS (Design Maximum Rating System)

	Triode Section	Pentode Section
Plate Supply Voltage (Max.)	600	600 Volts
Plate Voltage (Max.)	140	275 Volts
Grid No. 2 Supply Voltage (Max.)	—	600 Volts
Grid No. 2 Voltage (Max.)	—	275 Volts
Grid No. 1 Voltage (Max.)	—	-50 Volts