

Color Television Type

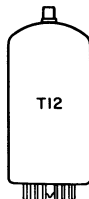
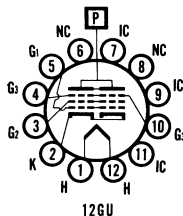
HORIZONTAL DEFLECTION AMPLIFIER

6KN6

42KN6

Beam Power Pentode (2 Sections in Parallel)

Construction.....Compactron T-12
 BaseButton 12 Pin, E12-74
 Top CapC1-2 or C1-3
 Basing12GU
 Outline12-82
 Maximum Diameter1.562 In.
 Maximum Seated Height4.000 In.
 Maximum Overall Height4.375 In.



ELECTRICAL DATA HEATER OPERATION

| | 42KN6 | 6KN6 |
|---|--------------|-------------|
| Heater Voltage..... | 42 | 6.3 Volts |
| Heater Current | 450 | 3000 Ma |
| Heater Warm-up Time | 11 | — Seconds |
| Maximum Heater-Cathode Voltage | | |
| Heater Negative with Respect to Cathode | | 200 Volts |
| Total DC and Peak..... | | |
| Heater Positive with Respect to Cathode | | |
| DC | | 100 Volts |
| Total DC and Peak..... | | 200 Volts |
| DIRECT INTERELECTRODE CAPACITANCES (Unshielded) | | |
| Grid to Plate | | 1.0 Pf |
| Input | | 44.0 Pf |
| Output | | 18.0 Pf |
| RATINGS (Design Maximum Rating System) | | |
| Horizontal Deflection Amplifier (Sections in Parallel)⁽¹⁾ | | |
| DC Plate Supply Voltage (Boost + DC Power Supply) (Max.) | | 770 Volts |
| Peak Positive Pulse Plate Voltage | | 6500 Volts |
| Peak Negative Pulse Plate Voltage (Max.) | | 1500 Volts |

| | |
|---|------------|
| Plate Dissipation (Max.) ⁽²⁾ | 30 Watts |
| Peak Negative Grid No. 1 Voltage (Max.) | 330 Volts |
| Grid No. 2 Voltage (Max.) | 220 Volts |
| Grid No. 2 Dissipation (Max.) | 5.0 Watts |
| Average Cathode Current (Max.) | 400 Ma |
| Peak Cathode Current (Max.) | 1500 Ma |
| Grid No. 1 Circuit Resistance (Max.) | 1.0 Megohm |
| Bulb Temperature (At Hottest Point) | 260 °C |

CHARACTERISTICS AND TYPICAL OPERATION (Sections in Parallel)

| | | |
|---|------|-------------------|
| Plate Voltage | 5500 | 130 Volts |
| Grid No. 2 Voltage | 125 | 130 Volts |
| Grid No. 1 Voltage | — | -20 Volts |
| Plate Current | — | 100 Ma |
| Grid No. 2 Current | — | 4.0 Ma |
| Transconductance | — | 16,000 μ mhos |
| Plate Resistance | — | 4000 Ohms |
| Amplification Factor ⁽³⁾ | — | 4.5 |
| E _{c1} for I _b = 1.0 Ma (Approx.) | — | -33 Volts |
| E _{c1} for I _b = 75 μ a (Approx.) | 100 | — Volts |

INSTANTANEOUS PLATE KNEE VALUES (Sections in Parallel)

E_b = 60 V, E_{c2} = 125 V, and E_{c1} = 0 V
 I_b = 800 Ma; and I_{c2} = 50 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 necessary to protect the tube in the absence of excitation.
- (3) Amplification factor with tube operating as a triode with 130 volts on the plate and Grid No. 2 and -20 volts on Grid No. 1.

AVERAGE PLATE CHARACTERISTICS

