

Color Television Type

HORIZONTAL DEFLECTION AMPLIFIER

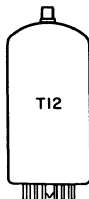
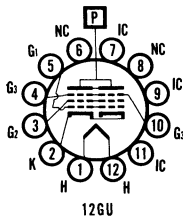
6KN6

42KN6

Beam Power Pentode (2 Sections in Parallel)

Construction.....Compactron T-12
Base Button 12 Pin, E12-74
Top Cap C1-2 or C1-3
Basing 12GU
Outline 12-82

Maximum Diameter 1.562 In.
Maximum Seated Height 4.000 In.
Maximum Overall Height 4.375 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
Ec1 for Ib = 1.0 Ma (Approx.)	—	-33 Volts
Ec1 for Ib = 75 μ a (Approx.)	100	— Volts

INSTANTANEOUS PLATE KNEE VALUES (Sections in Parallel)

Eb = 60 V, Ec2 = 125 V, and Ec1 = 0 V

Ib = 800 Ma; and Ic2 = 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

