

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

Grid No. 1 to Plate	0.6 Pf
Input: g1 to (h + k + g3).....	23 Pf
Output: p to (h + k + g2 + g3)	8.5 Pf

RATINGS (Design Maximum Rating System)

Horizontal Deflection Amplifier⁽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
Plate Dissipation (Max.) ⁽²⁾	18 Watts
Negative Grid No. 1 Voltage (Max.)	55 Volts
Peak Negative Grid No. 1 Voltage (Max.)	330 Volts
Grid No. 2 Voltage (Max.)	220 Volts
Grid No. 2 Dissipation (Max.)	3.5 Watts
Positive DC Grid No. 3 Voltage (Max.)	70 Volts
Average 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	130 Volts
Grid No. 3 Voltage	0	0 Volt
Grid No. 2 Voltage	130	130 Volts
Grid No. 1 Voltage	—	-20 Volts
Plate Current	—	50 Ma
Grid No. 2 Current	—	1.75 Ma
Transconductance	—	9100 μmhos
Plate Resistance.....	—	11,000 Ohms
Amplification Factor ⁽³⁾	—	4.7
Ec1 for Ib = 1.0 Ma (Approx.)	-66	-33 Volts

INSTANTANEOUS PLATE KNEE VALUES

Eb = 60 V; Ec2 = 130 V, Ec1 = 0 V and Ec3 = 0 V
Ib = 410 Ma; and Ic2 = 24 Ma
Eb = 60 V; Ec2 = 130 V, Ec1 = 0 V and Ec3 = +25 V
Ib = 410 Ma; Ic2 = 23 Ma and Ic3 = 2 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 130 volts on the plate and Grid No. 2 and -20 volts on Grid No. 1.

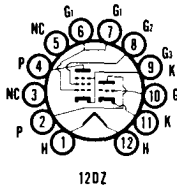
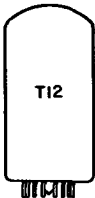
16LU8A

Color Television Type

VERTICAL DEFLECTION
OSCILLATOR and AMPLIFIER

High Mu Triode and
Beam Power Pentode

Construction.....	Compactron T-12
Base	E12-74
Basing	12DZ
Outline	12-56
Maximum Diameter	1.562 In.
Maximum Seated Height	2.500 In.
Maximum Overall Height	2.875 In.



ELECTRICAL DATA

HEATER OPERATION

Heater Voltage.....	16 Volts
Heater Current	600 Ma
Heater Warm-up Time	11 Seconds

The 16LU8A is identical to the 6LU8 except for shorter bulb length and Heater Characteristic