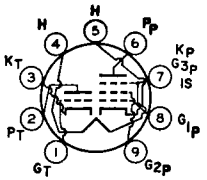


9HX

HIGH-MU TRIODE—SHARP-CUTOFF PENTODE

6DX8/ ECL84

10DX8/LCL84

Miniature type used in color and black-and-white television-receiver applications. The triode unit is used as a sync-separator, sync-amplifier, keyed-agc, or noise-suppressor tube. The pentode unit is used as a video-output tube. **Outlines section,** 6E; requires miniature 9-contact socket. Type 10DX8/LCL84 is identical with type 6DX8/ECL84 except for heater ratings.

	6DX8/ECL84	10DX8/LCL84	
Heater Voltage (ac/dc)	6.3	10.2	volts
Heater Current	0.72	0.45	ampere
Peak Heater-Cathode Voltage	±200 max	±200 max	volts

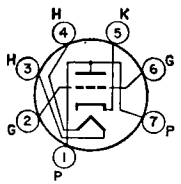
Class A_1 Amplifier

MAXIMUM RATINGS (Design-Center Values)	Triode Unit	Pentode Unit	
Plate Supply Voltage	550	550	volts
Peak Plate Voltage, with maximum plate current of 0.1 mA	600	—	volts
Plate Voltage	300	300	volts
Grid-No.2 (Screen-Grid) Supply Voltage	—	550	volts
Grid-No.2 Voltage	—	300	volts
Cathode Current	12	40	mA
Plate Dissipation	1	4	watts
Grid-No.2 Input	—	1.7	watts

CHARACTERISTICS	Triode Unit		Pentode Unit		
Plate Voltage	200	170	200	220	volts
Grid-No.2 Voltage	—	170	200	220	volts
Grid No.1 Voltage	—1.7	—2.1	—2.9	—3.4	volts
Amplification Factor	65	—	—	—	
Mu-Factor, Grid-No.2 to Grid-No.1	—	36	36	36	
Plate Resistance (Approx.)	—	0.1	0.13	0.15	megohm
Transconductance	4000	11000	10400	10000	μmhos
Plate Current	3	18	18	18	mA
Grid-No.2 Current	—	3	3	3	mA

MAXIMUM CIRCUIT VALUES	Triode Unit	Pentode Unit	
Grid-No.1- Circuit Resistance:			
For fixed-bias operation	1	1	megohm
For cathode-bias operation	3	2	megohms

• With maximum duty factor of 0.18 and maximum pulse duration of 18 microseconds.



7DK

MEDIUM-MU TRIODE

6DZ4

Miniature type used as a local-oscillator tube in uhf color and black-and-white television receivers covering the frequency range from 470 to 890 MHz. **Outlines section,** 5B; requires miniature 7-contact socket. For curve of average plate characteristics, refer to type 6AF4A.

Heater Voltage (ac/dc)	6.3	volts
Heater Current	0.225	ampere
Heater-Cathode Voltage:		
Peak value	±50 max	volts
Average value	25 max	volts
Direct Interelectrode Capacitances (Approx.):°		
Grid to Plate	1.8	pF
Grid to Cathode and Heater	2.2	pF
Plate to Cathode and Heater	1.3	pF

° With external shield connected to cathode.

Class A_1 Amplifier

CHARACTERISTICS

Plate Supply Voltage	80	volts
Plate Resistor	2700	ohms
Amplification Factor	14	
Plate Resistance (Approx.)	2000	ohms
Transconductance	6700	μmhos
Plate Current	15	mA
Grid Voltage (Approx.) for plate current of 20 μA	—11	volts

UHF Oscillator

MAXIMUM RATINGS (Design-Maximum Values)

Plate Voltage	135	volts
Grid Voltage, Negative-bias value	50	volts
Grid Current	2	mA
Cathode Current	20	mA
Plate Dissipation	2.3	watts

TYPICAL OPERATION AS OSCILLATOR AT 1000 MHz

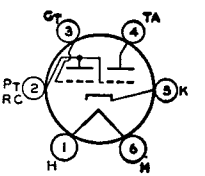
Plate Supply Voltage	135	volts
Plate-Circuit Resistance	2700	ohms
Grid Resistor	10000	ohms
Plate Current	15.5	mA
Grid Current (Approx.)	800	μA

MAXIMUM CIRCUIT VALUES

Grid-Circuit Resistance:		
For fixed-bias operation	Not recommended	
For cathode-bias operation	0.5	megohm

6DZ7 Refer to chart at end of section.

6E5 ELECTRON-RAY TUBE



6R

Glass type used to indicate the effects of a change in a controlling voltage. It is used to indicate accurate radio-receiver tuning. **Outlines section, 13H;** requires 6-contact socket. **Heater:** volts (ac/dc), 6.3; amperes, 0.3. For additional considerations, refer to **Tuning Indication with Electron-Ray Tubes** in **Electron Tube Applications** section.

Tuning Indicator

MAXIMUM AND MINIMUM RATINGS (Design-Center Values)

Plate-Supply Voltage	250 max	volts
Target Voltage	250 max	volts
	125 min	volts

TYPICAL OPERATION

Plate and Target Supply Voltage	200	250	volts
Series Triode-Plate Resistor	1	1	megohm
Target Current*†	3	4	mA
Triode-Plate Current*	0.19	0.24	mA
Triode-Grid Voltage (Approx.):			
For shadow angle of 0°	—6.5	—8	volts
For shadow angle of 90°	0	0	volts

* For zero triode-grid voltage.
† Subject to wide variations.

6E6 Refer to chart at end of section.

6E7 Refer to chart at end of section.

6EA4 Refer to chart at end of section.

6EA5 Refer to chart at end of section. For replacement use type 6CY5.