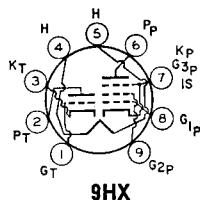


15DQ8/ PCL84

HIGH-MU TRIODE— SHARP-CUTOFF PENTODE

Miniature type used in color and black-and-white television receiver applications. The triode unit is used as a sync-separator, sync-amplifier, keyed-agg, or noise-suppressor tube. The pentode unit is used as a video-output tube. **Outlines section, 6E**; requires miniature 9-contact socket.



Heater Voltage (ac/dc)	15	volts
Heater Current	0.3	ampere
Peak Heater-Cathode Voltage	±200 max	volts

15	volts
0.3	ampere
±200 max	volts

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum 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	250	250	volts
Grid-No.2 (Screen-Grid) Supply Voltage	—	550	volts
Grid-No.2 Voltage	—	250	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	volts
Grid-No.2 Voltage	—	170	200	volts
Grid-No.1 Voltage	-1.7	-2.1	-2.9	volts
Amplification Factor	65	—	—	
Mu-Factor, Grid-No.2 to Grid-No.1	—	36	36	
Plate Resistance (Approx.)	—	0.1	0.13	megohm
Transconductance	4000	11000	10400	10000 μmhos
Plate Current	3	18	18	mA
Grid-No.2 Current	—	3	3	mA

TYPICAL OPERATION OF PENTODE UNIT AS VIDEO OUTPUT TUBE

Plate Supply Voltage	170	200	220	volts
Series Plate Resistor	3000	3000	3000	ohms
Grid-No.2 Voltage	170	200	220	volts
Grid-No.1 Voltage	-2	-2.8	-3.3	volts
Transconductance	10400	10000	9700	μmhos
Plate Current	18	18	18	mA
Grid-No.2 Current	3.2	3.1	3.1	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.

15EA7 For replacement use type 13EM7/15EA7.

15EW7 Refer to type 6EW7.

15FM7 Refer to chart at end of section.
For replacement use type 13FM7/15FM7.

15FY7 Refer to type 6FY7.

15HB6 Refer to chart at end of section.

15KY8 Refer to chart at end of section.

15KY8A Refer to type 6KY8A.

15LE8 Refer to chart at end of section.