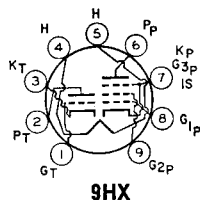


# 15DQ8/ PCL84

## 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-agc, 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

**9HX**

### Class A<sub>1</sub> 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	200	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

### 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.