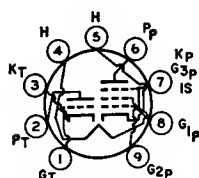


HIGH-MU TRIODE— SHARP-CUTOFF PENTODE

15DQ8


9HX

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

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
Grid-No.2 Voltage	—	170	200
Grid-No.1 Voltage	—1.7	—2.1	—2.9
Amplification Factor	65	—	—
Mu-Factor, Grid-No.2 to Grid-No.1	—	36	36
Plate Resistance (Approx.)	—	0.1	0.13
Transconductance	4000	11000	10400
Plate Current	3	18	18
Grid-No.2 Current	—	3	3

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.

Refer to type 6EW7.

15EW7

Refer to type 6FM7.

15FM7

Refer to type 6FY7.

15FY7

Refer to chart at end of section.

15HB6

Refer to chart at end of section.

15KY8

Refer to type 6KY8A.

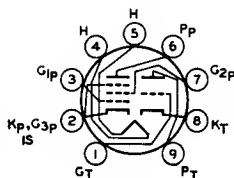
15KY8A

Refer to type 6LE8.

15LE8

16A8**HIGH-MU TRIODE—
POWER PENTODE**

Miniature type used in television receiver applications. The triode unit is used as a vertical oscillator or as an af amplifier, and the pentode unit is used as a vertical output tube or as an audio output tube. Outlines section, 6G; requires 9-contact socket. Heater: volts (ac/dc), 16; amperes, 0.3; maximum heater-cathode volts, ± 200 .

**9EX****Class A₁ Amplifier****MAXIMUM RATINGS (Design-Maximum Values)**

	Triode Unit	Pentode Unit	
Plate Supply Voltage	550	550	volts
Peak Plate Voltage*	600	2500	volts
Plate Voltage	250	250	volts
Peak Inverse Plate Voltage	—	500	volts
Grid-No.2 (Screen-Grid) Supply Voltage	—	550	volts
Grid-No.2 Voltage	—	250	volts
Cathode Current	15	50	mA
Plate Dissipation (Frame Output)	—	5	watts
Plate Dissipation (Audio Output)	—	7	watts
Grid-No.2 Input	—	1.8	watts
Peak Grid-No.2 Input	—	3.2	watts

CHARACTERISTICS

	Triode Unit	Pentode Unit				
Plate Voltage	100	100	170	200	200	volts
Grid-No.2 Voltage	—	100	170	200	200	volts
Grid-No.1 Voltage	0	—6	—11.5	—12.5	—16	volts
Amplification Factor	70	—	—	—	—	
Mu Factor, Grid No.2 to Grid No.1	—	10	9.5	9.5	9.5	
Plate Resistance	—	15000	16000	20500	20000	ohms
Transconductance	2500	6800	7500	6800	6400	μ mhos
Plate Current	3.5	26	41	35	35	mA
Grid-No.2 Current	—	5	8	6.5	7	mA

MAXIMUM CIRCUIT VALUES**Grid-No.1-Circuit Resistance:**

For fixed-bias operation	1	1	megohm
For cathode-bias operation	3	2	megohms

* With a maximum duty factor of 0.04 and maximum pulse duration of 0.8 milliseconds.

16AQ3

Refer to chart at end of section.

**16AQ3/
XY88****DIODE**

Miniature type used as booster diodes in line-time-base circuits of transformerless television receivers.

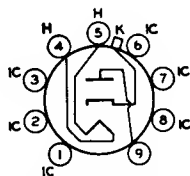
Outlines section, 7D; requires miniature 9-contact socket. Heater: volts (ac/dc), 16.4; amperes, 0.6; maximum heater-cathode volts, 6600 peak.

MAXIMUM RATINGS (Design-Center Values)

Supply Voltage at zero current	550	volts
Supply Voltage	250	volts
Peak Plate Current	550	mA
Average Plate Current	220	mA
Plate Dissipation	5	watts
Peak Negative-Pulse Plate Voltage*	6000#	volts

* Under no conditions should an absolute maximum value of 7500 volts be exceeded.

The pulse duration must not exceed 22 per cent of a cycle, or a maximum of 18 microseconds.

**9CB****16GK6**

Refer to type 6GK6.

16GY5

Refer to type 6GY5.