

10Z10

Refer to type 6Z10.

11

Refer to chart at end of section.

11AF9

Refer to type 6AF9.

11AR11

Refer to type 6AR11.

11BM8**HIGH-MU TRIODE—
POWER PENTODE**

Miniature type used as vertical deflection oscillator or af amplifier and vertical deflection amplifier or af power amplifier in television receivers. Outlines section, 6G; requires miniature 9-contact socket. This type is identical with type 16A8/PCL82 except for the following items:

Heater Voltage	10.7	volts
Heater Current	0.45	mA

11BQ11

Refer to type 8BQ11.

11BT11**DUAL TRIODE—
SHARP-CUTOFF PENTODE**

Duodecar type used in television receiver applications. The triode units are used for general-purpose applications; the pentode unit is used in video-amplifier service. Outlines section, 8B; requires duodecar 12-contact socket. Heater: volts (ac/dc), 10.7; amperes, 0.6; warm-up time (average), 11 seconds; maximum heater-cathode volts, ± 200 peak, 100 average.

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

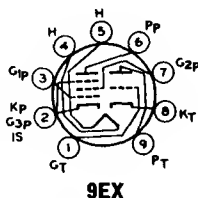
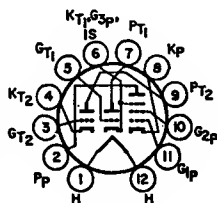
	Triode Unit No. 1	Triode Unit No. 2	Pentode Unit	
Plate Voltage	330	330	165	volts
Grid-No.2 (Screen-Grid) Voltage	—	—	165	volts
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0	0	0	volts
Plate Dissipation	1.5	2	3.5	watts
Grid-No.2 Input	—	—	1.5	watts

CHARACTERISTICS

Plate Voltage	200	200	35	160	volts
Grid-No.2 Voltage	—	—	100	100	volts
Grid-No.1 Voltage	—	—	0	—	volts
Cathode-Bias Resistor	270	470	—	82	ohms
Amplification Factor	69	40	—	—	—
Plate Resistance (Approx.)	12500	7600	—	51000	ohms
Transconductance	5500	5300	—	19000	μ mhos
Plate Current	7.1	7.2	64	17.4	mA
Grid-No.2 Current	—	—	13.5	3.2	mA
Grid-No.1 Voltage (Approx.) for plate current of 100 μ A	—	—8	—	—6.6	volts
Grid-No.1 Voltage (Approx.) for plate current of 50 μ A	—5.5	—	—	—	volts

MAXIMUM CIRCUIT VALUES

	Triode Unit No. 1	Triode Unit No. 2	Pentode Unit	
Grid-No.1-Circuit Resistance:				
For fixed-bias operation	0.5	0.5	0.05	megohm
For cathode-bias operation	1	1	0.1	megohm

**9EX****12GS**

Refer to chart at end of section.

11CA11

Refer to chart at end of section.

11CF11

Refer to chart at end of section.

11CH11

Refer to chart at end of section.

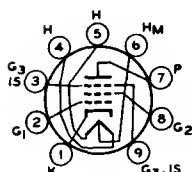
11CY7

Refer to type 6DS5.

11DS5

Refer to type 6FY7.

11FY7



9BF

SHARP-CUTOFF PENTODE

11HM7

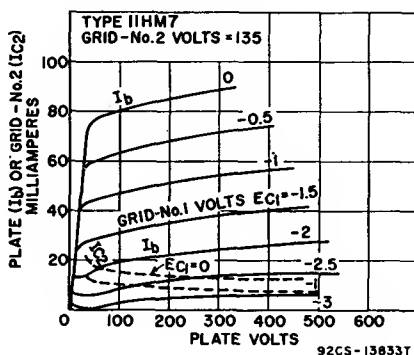
Miniature type with frame grid used as video output amplifier in color television receivers. Outlines section, 6E; requires miniature 9-contact socket.

Heater Arrangement	Series	Parallel	
Heater Voltage (ac/dc)	11	5.5	volts
Heater Current	0.3	0.6	ampere
Heater-Cathode Voltage:			
Peak value		±200 max	volts
Average value		100 max	volts
Direct Interelectrode Capacitances:			
Grid No.1 to Plate		0.15 max	pF
Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield		14	pF
Plate to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield		5	pF

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

Plate Voltage	330	volts
Grid-No.2 (Screen-Grid) Supply Voltage	330	volts
Grid-No.2 Voltage	See curve page 300	
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0	volts
Plate Dissipation	7	watts
Grid-No.2 Input:		
For grid-No.2 voltages up to 165 volts	1	watt
For grid-No.2 voltages between 165 and 330 volts	See curve page 300	



CHARACTERISTICS

Plate Supply Voltage	200	volts
Grid-No.3 Voltage	0	volts
Grid-No.2 Voltage	135	volts
Cathode-Bias Resistor	47	ohms