

Pentode Unit as FM Detector

MAXIMUM RATINGS (Design-Maximum Values)

Plate Voltage	330	volts
Grid-No.3 Voltage	28	volts
Grid-No.2 Supply Voltage	330	volts
Grid-No.2 Voltage	See curve page 98	
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0	volts
Plate Dissipation	1.7	watts
Grid-No.2 Input:		
For grid-No.2 voltages up to 165 volts	1.1	watts
For grid-No.2 voltages between 165 and 330 volts	See curve page 98	

13Z10

Refer to type 6Z10.

13Z10/13J10

Refer to type 6Z10.

14A4

Refer to chart at end of section.

14A5

Refer to chart at end of section.

14A7

Refer to chart at end of section.

14AF7

Refer to chart at end of section.

14B6

Refer to chart at end of section.

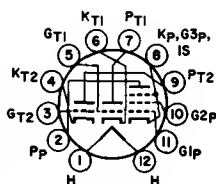
14B8

Refer to chart at end of section.

14BL11

DUAL TRIODE—
SHARP-CUTOFF PENTODE

Duodecar type used in television receiver applications. The pentode unit is used for video amplifier service, and the triode units for general-purpose use. Outlines section, 8B; requires duodecar 12-contact socket. Heater: volts (ac/dc), 14.2; amperes, 0.45; average warm-up time 11 seconds; maximum heater-cathode volts, ± 200 peak, 100 average.



12GC

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

	Triode Unit No.1	Triode Unit No.2	Pentode Unit	
Plate Voltage	330	330	250	volts
Grid-No.2 (Screen-Grid) Voltage	—	—	125	volts
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0	0	0	volts
Plate Dissipation	1.5	2	2.5	watts
Grid-No.2 Input	—	—	1.25	watts

CHARACTERISTICS

Plate Voltage	200	200	35	200	volts
Grid-No.2 Voltage	—	—	100	100	volts
Grid-No.1 Voltage	—	—	0	—	volts
Cathode-Bias Resistor	470	270	—	82	ohms
Amplification Factor	40	69	—	—	
Plate Resistance (Approx.)	7600	12500	—	70000	ohms
Transconductance	5300	5500	—	19000	μ mhos
Plate Current	7.2	7.1	40	16	mA
Grid-No.2 Current	—	—	13	3	mA
Grid-No.1 Voltage (Approx.) for plate current of 100 μ A	—8	—5.5	—	—5.5	volts

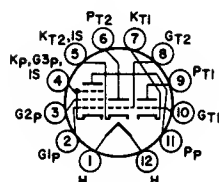
MAXIMUM CIRCUIT VALUES

Grid-No.1-Circuit Resistance:				
For fixed-bias operation	0.5	0.5	0.1	megohm
For cathode-bias operation	1	1	0.25	megohm
	0	0	—	volts

DUAL TRIODE— SHARP-CUTOFF PENTODE

14BR11

Duodecar type used in television receiver applications. The high-mu triode unit No. 1 is used for general-purpose use, the medium-mu triode unit No. 2 for sync separator service, and the pentode unit for video amplifier service. Outlines section, 8C; requires duodecar 12-contact socket. Heater: volts (ac/dc), 14.2; amperes, 0.45; warm-up time, 11 seconds; maximum heater-cathode volts, ± 200 peak, 100 average.



12GL

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

	Triode Unit No.1	Triode Unit No.2	Pentode Unit	
Plate Voltage	330	330	330	volts
Grid-No.2 (Screen-Grid) Supply Voltage	—	—	330	volts
Grid-No.2 Voltage	—	—	See curve page 98	
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0	0	0	volts
Plate Dissipation	1.5	2	4	watts
Grid-No.2 Input:				
For grid-No.2 voltages up to 155 volts	—	—	1.1	watts
For grid-No.2 voltages between 155 and 330 volts	—	—	See curve page 98	

CHARACTERISTICS

Plate Voltage	200	200	35	135	volts
Grid-No.2 Voltage	—	—	135	135	volts
Grid-No.1 Voltage	-2	—	0	—	volts
Cathode-Bias Resistor	—	220	—	100	ohms
Amplification Factor	68	41	—	—	
Plate-Resistance (Approx.)	12400	9400	—	45000	ohms
Transconductance	5500	4400	—	10400	μ mhos
Plate Current	7	9.2	34	17	mA
Grid-No.2 Current	—	—	13	4	mA
Grid-No.1 Voltage (Approx.) for plate current of 100 μ A	-5.5	-5.5	—	-6	volts

MAXIMUM CIRCUIT VALUES

Grid-No.1-Circuit Resistance:				
For fixed-bias operation	0.5	0.5	1	megohm
For cathode-bias operation	1	1	1	megohm

Refer to chart at end of section.

14C5

Refer to chart at end of section.

14C7

Refer to chart at end of section.

14E6

Refer to chart at end of section.

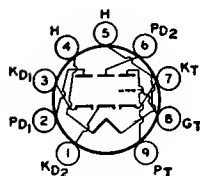
14E7

Refer to chart at end of section.

14F7

Refer to chart at end of section.

14F8



9KR

TWIN DIODE— HIGH-MU TRIODE

14GT8

Miniature type used as combined detector and voltage amplifier in radio receivers. Outlines section, 6B; requires miniature 9-contact socket.

Heater Voltage (ac/dc)	14	volts
Heater Current	0.15	ampere
Heater-Cathode Voltage:		
Peak value	± 200 max	volts
Average value	100 max	volts