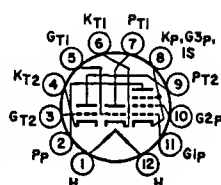


14A4	Refer to chart at end of section.
14A5	Refer to chart at end of section.
14A7	Refer to chart at end of section.
14AF7	Refer to chart at end of section.
14B6	Refer to chart at end of section.
14B8	Refer to chart at end of section.

14BL11**DUAL TRIODE—
SHARP-CUTOFF PENTODE**

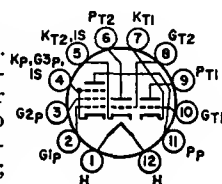
Duodecar type used in television receiver applications. The pentode unit is used for video amplifier service, and the triode units for general-purpose use. Outlines section, 8B; requires duodecar 12-contact socket. Heater: volts (ac/dc), 14.2; amperes, 0.45; average warm-up time 11 seconds; maximum heater-cathode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

**12GC****Class A₁ Amplifier**

	Triode Unit No.1	Triode Unit No.2	Pentode Unit	
MAXIMUM RATINGS (Design-Maximum Values)				
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
Grid-No.2 Voltage	—	—	100	100
Grid-No.1 Voltage	—	—	0	—
Cathode-Bias Resistor	470	270	—	82
Amplification Factor	40	69	—	—
Plate Resistance (Approx.)	7600	12500	—	70000
Transconductance	5300	5500	—	19000
Plate Current	7.2	7.1	40	16
Grid-No.2 Current	—	—	13	3
Grid-No.1 Voltage (Approx.) for plate current of 100 μ A	—8	—5.5	—	—5.5
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

14BR11**DUAL TRIODE—
SHARP-CUTOFF PENTODE**

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 300	
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 165 volts	—	—	1.1	watts
For grid-No.2 voltages between 165 and 330 volts	—	—	See curve page 300	

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	μmhos
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 μA	—5.5	—6.5	—	—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**

Refer to chart at end of section. **14GT8**

Refer to chart at end of section. **14H7**

Refer to chart at end of section. **14J7**

Refer to chart at end of section. **14JG8**

Refer to chart at end of section. **14N7**

Refer to chart at end of section. **14Q7**

Refer to chart at end of section. **14R7**

Refer to chart at end of section. **15**

Refer to type 6AF11. **15AF11**

Refer to chart at end of section. **15BD11**

Refer to chart at end of section. **15BD11A**

Refer to chart at end of section. **15CW5**

Refer to type 6CW5/EL86. **15CW5/PL84**

Refer to chart at end of section. **15DQ8**