

	Triode Connection	Pentode Connection	
Grid-No.1 Voltage (Approx.) for plate current of 1 mA	—	—66	—33 volts
Amplification Factor	4.7	—	—
* Grid No.2 tied to plate.			

Horizontal-Deflection Amplifier

For operation in a 525-line, 30-frame system

MAXIMUM RATINGS (Design-Maximum Values)

DC Plate Supply Voltage	770	volts
Peak Positive-Pulse Plate Voltage#	6000	volts
Peak Negative-Pulse Plate Voltage	1500	volts
DC Grid-No.3 Voltage	70	volts
DC Grid-No.2 Voltage	220	volts
DC Grid-No.1 Voltage, Negative-bias value	55	volts
Peak Negative-Pulse Grid-No.1 Voltage	330	volts
Average Cathode Current	230	mA
Peak Cathode Current	800	mA
Plate Dissipation**	18	watts
Grid-No.2 Input	3.5	watts
Bulb Temperature (At hottest point)	220	°C
MAXIMUM CIRCUIT VALUE		
Grid-No.1-Circuit Resistance	1	megohm

Pulse duration must not exceed 15% of a horizontal scanning cycle (10 microseconds).

** A bias resistor or other means is required to protect the tube in absence of excitation.

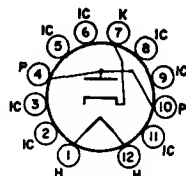
34

Refer to chart at end of section.

34CE3

HALF-WAVE VACUUM RECTIFIER

Duodecar type used as damper tube in television receivers. Outlines section, 8G; requires duodecar 12-contact socket. Heater: volts, 34.5; amperes, 0.45; warm-up time, 11 seconds.



12GK

Damper Service

For operation in a 525-line, 30-frame system

MAXIMUM RATINGS (Design-Maximum Values)

Peak Inverse Plate Voltage#	5000	volts
Peak Plate Current	1500	mA
Average Plate Current	350	mA
Plate Dissipation	11	watts
Heater-Cathode Voltage:		
Peak value	+300	—5000 volts
Average value	+100	—900 volts

CHARACTERISTICS, Instantaneous Value

Tube Voltage Drop for plate current of 680 mA	20	volts
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Pulse duration must not exceed 15% of a horizontal scanning cycle (10 microseconds).

34CM3

Refer to type 6CM3.

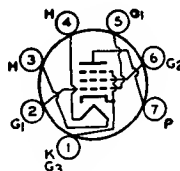
34GD5

Refer to chart at end of section.

34GD5A

BEAM POWER TUBE

Miniature type used in audio output stages of compact ac/dc radio receivers. Outlines section, 5D; requires miniature 7-contact socket. Heater: volts (ac/dc), 34; amperes 0.1; warm-up time, 20 seconds; maximum heater-cathode volts, ± 200 peak, 100 average.



7CV

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

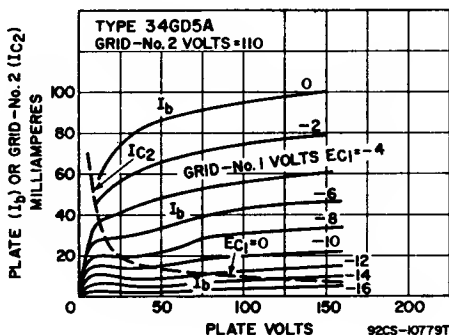
Plate Voltage	150	volts
Grid-No.2 (Screen-Grid) Voltage	130	volts
Grid-No.1 (Control-Grid) Voltage:		
Negative-bias value	50	volts
Positive-bias value	0	volts
Plate Dissipation	5	watts
Grid-No.2 Input	1.1	watts
Bulb Temperature (At hottest point)	250	°C

TYPICAL OPERATION AND CHARACTERISTICS

Plate Voltage	110	volts
Grid-No.2 Voltage	110	volts
Grid-No.1 Voltage	-7.5	volts
Peak AF Grid-No.1 Voltage	7.5	volts
Zero-Signal Plate Current	35	mA
Zero-Signal Grid-No.2 Current	3	mA
Plate Resistance (Approx.)	13000	ohms
Transconductance	5700	μmhos
Load Resistance	2500	ohms
Total Harmonic Distortion	10	per cent
Maximum-Signal Power Output	1.4	watts

MAXIMUM CIRCUIT VALUES

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



Refer to chart at end of section.

35

Refer to chart at end of section.

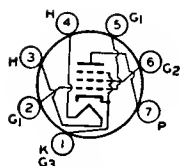
35A5

Refer to chart at end of section.

35B5

BEAM POWER TUBE

35C5



7CV

Miniature type used in output stage of compact, ac/dc radio receivers. Outlines section, 5D; requires miniature 7-contact socket. This tube, like other power-handling tubes, should be adequately ventilated. Except for terminal connections and slightly higher ratings, type 35C5 is equivalent in performance to miniature type 35B5 and, within its maximum ratings, to glass octal type 35L6GT.

Heater Voltage (ac/dc)	35	volts
Heater Current	0.15	ampere
Heater-Cathode Voltage:		
Peak value	±200 max	volts
Average value	100 max	volts