

Class A₁ Amplifier

CHARACTERISTICS	Triode*	Pentode Connection			
	Connection				
Plate Voltage	130	5000	50	130	volts
Grid No.3 (Suppressor Grid)		Connected to cathode at socket			
Grid-No.2 (Screen-Grid) Voltage	130	130	130	130	volts
Grid-No.1 (Control-Grid) Voltage	-20	—	0 ^Δ	-20	volts
Plate Resistance (Approx.)	—	—	—	9900	ohms
Transconductance	—	—	—	9000	μmhos
Plate Current	—	—	450*	46	mA
Grid-No.2 Current	—	—	29°	1.8	mA
Grid-No.1 Voltage (Approx.) for plate current of 1 mA	-64	—	—	-32	volts
Triode Amplification Factor	4.8	—	—	—	

* Grid No.2 connected to plate.

^Δ Applied for short interval (2 seconds max.) so as not to damage tube.

° This value can be measured by a method involving a recurrent waveform such that the maximum ratings of the tube will not be exceeded.

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 [#]	6500	volts
Peak Negative-Pulse Plate Voltage	1500	volts
DC Grid-No.3 Voltage, Positive-bias value	70	volts
DC Grid-No.2 Voltage	220	volts
DC Grid-No.1 Voltage, Negative-bias value	55	volts
Peak Negative Grid-No.1 Voltage	330	volts
Peak Cathode Current	800	mA
Average Cathode Current	230	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
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[#] Pulse duration must not exceed 15% of one horizontal scanning cycle (10 microseconds).

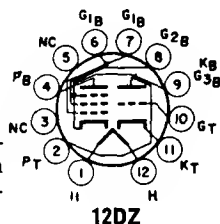
** A bias resistor or other means is required to protect the tube in absence of excitation.

6JZ8

17JZ8

MEDIUM-MU TRIODE—
BEAM POWER TUBE

Duodecar type used in combined vertical-deflection-oscillator and vertical-deflection-amplifier applications in television receivers. Outlines section, 8C; requires duodecar 12-contact socket.



	6JZ8	17JZ8	
Heater Voltage (ac/dc)	6.3	16.8	volts
Heater Current	1.2	0.45	amperes
Heater Warm-up Time	—	11	seconds
Heater-Cathode Voltage:			
Peak value	±200 max	±200 max	volts
Average value	100 max	100 max	volts

Class A₁ Amplifier

CHARACTERISTICS	Triode Unit Beam Power Unit		
Plate Voltage	150	45	120
Grid-No.2 (Screen-Grid) Voltage	—	110	110
Grid-No.1 (Control-Grid) Voltage	-5	0	-8
Amplification Factor	20	—	—
Plate Resistance (Approx.)	8500	—	11700
Transconductance	2350	—	7100
Plate Current	5.5	122*	46
Grid-No.2 Current	—	16.5*	3.5

ohms
μmhos
mA
mA

	Triode Unit	Beam Power Unit	
Grid-No.1 Voltage (Approx.) for plate current of 10 μ A	—10	—	volts
Grid-No.1 Voltage (Approx.) for plate current of 100 μ A	—	—25	volts

* This value can be measured by a method involving a recurrent waveform such that the maximum ratings of the tube will not be exceeded.

Vertical-Deflection Oscillator and Amplifier

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

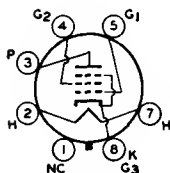
	Triode Unit Oscillator	Beam Power Unit Amplifier	
MAXIMUM RATINGS (Design-Maximum Values)			
DC Plate Voltage	250	250	volts
Peak Positive-Pulse Plate Voltage#	—	2000	volts
DC Grid-No.2 Voltage	—	200	volts
Peak Negative-Pulse Grid-No.1 Voltage	400	150	volts
Peak Cathode Current	70	245	mA
Average Cathode Current	20	70	mA
Plate Dissipation*	1	7	watts
Grid-No.2 Input	—	1.8	watts
MAXIMUM CIRCUIT VALUES			
Grid-No.1-Circuit Resistance:			
For fixed-bias operation	1	1	megohm
For cathode-bias operation	2.2	2.2	megohms

Pulse duration must not exceed 15% of a vertical scanning cycle (2.5 milliseconds).

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

Refer to chart at end of section.

6K5GT



7S

POWER PENTODE

6K6GT

Glass octal type used in output stage of radio receivers and, triode-connected, as a vertical-deflection amplifier in television receivers. This type may be supplied with pin No.1 omitted. Outlines section, 13D; requires octal socket. This tube, like other power-handling tubes, should be adequately ventilated.

Heater Voltage (ac/dc)	6.3	volts
Heater Current	0.4	ampere
Heater-Cathode Voltage:		
Peak value	± 200 max	volts
Average value	100 max	volts
Direct Interelectrode Capacitances (Approx.):		
Grid No.1 to Plate	0.5	pF
Grid No.1 to Cathode, Heater, Grid No.2, and Grid No.3	5.5	pF
Plate to Cathode, Heater, Grid No.2, and Grid No.3	6	pF

Class A₁ Amplifier

MAXIMUM RATING (Design-Center Values)			
Plate Voltage	315	volts	
Grid-No.2 (Screen-Grid) Voltage	285	volts	
Plate Dissipation	8.5	watts	
Grid-No.2 Input	2.8	watts	

TYPICAL OPERATION

Plate Voltage	100	250	315	volts
Grid-No.2 Voltage	100	250	250	volts
Grid-No.1 (Control-Grid) Voltage	—7	—18	—21	volts
Peak AF Grid-No.1 Voltage	7	18	21	volts
Zero-Signal Plate Current	9	32	25.5	mA
Maximum-Signal Plate Current	9.5	33	28	mA
Zero-Signal Grid-No.2 Current	1.6	5.5	4.0	mA
Maximum-Signal Grid-No.2 Current	3	10	9	mA
Plate Resistance (Approx.)	104000	90000	110000	ohms
Transconductance	1500	2300	2100	μ mhos
Load Resistance	12000	7600	9000	ohms
Total Harmonic Distortion	11	11	15	per cent
Maximum-Signal Power Output	0.85	3.4	4.5	watts