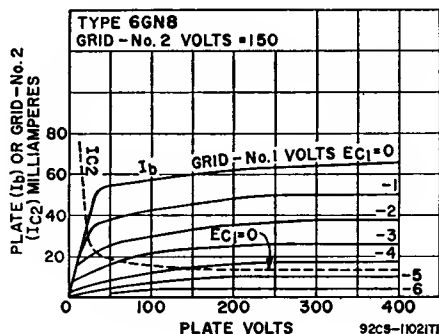


	Triode Unit	Pentode Unit	
Transconductance	2700	11500	μ mhos
Plate Current	2	55	mA
Grid-No.2 Current	—	18	mA
Grid Voltage (Approx.) for plate current of 20 μ A	—5	—	volts
Grid-No.1 Voltage (Approx.) for plate current of 100 μ A	—	—10	volts

MAXIMUM CIRCUIT VALUES

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

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



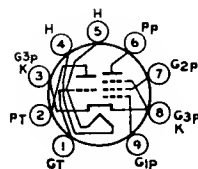
Refer to chart at end of section.

6GQ7

MEDIUM-MU TRIODE— SHARP-CUTOFF PENTODE

6GS7

5GS7, 7GS7



9GF

Miniature type used as a frequency changer in vhf television tuners. Outlines section, 6B; requires 9-contact socket. Types 5GS7 and 7GS7 are identical with type 6GS7 except for heater ratings. Heater: volts, 7.6; ampere, 0.3; maximum heater-cathode volts, ± 100 peak, 100 average.

	5GS7	6GS7	7GS7	
Heater Voltage	5.4	6.3	7.6	volts
Heater Current	0.45	0.375	0.3	ampere
Heater-Cathode Voltage:				
Peak value	± 200 max	± 200 max	± 200 max	volts
Average value	100 max	100 max	100 max	volts

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Center Values)

	Triode Unit	Pentode Unit	
Plate Voltage	125	250	volts
Grid-No.2 (Screen-Grid) Voltage	—	150	volts
Plate Dissipation	1.5	2	watts
Grid-No.2 Input	—	0.5	watt
Cathode Current	15	18	mA

CHARACTERISTICS

Plate Voltage	100	170	volts
Grid-No.2 Voltage	—	150	volts
Grid-No.1 (Control-Grid) Voltage	—3	—1.2	volts
Plate Current	14	10	mA
Grid-No.2 Current	—	3.3	mA
Transconductance	5500	12000	μ mhos
Plate Resistance	—	0.35 min	megohm
Amplification Factor	17	—	

MAXIMUM CIRCUIT VALUES

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

Pentode Unit as Frequency Changer**CHARACTERISTICS**

Plate Voltage	190	volts
Grid-No.2 Supply Voltage	190	volts
Oscillator Voltage	2.3	volts (rms)
Grid-No.2 Circuit Resistance	0.018	megohm
Grid-No.1 Circuit Resistance	0.1	megohm
Plate Current	8.5	mA
Grid-No.2 Current	2.7	mA
Grid-No.1 Current	30	μA
Plate Resistance	0.6	megohm
Conversion Transconductance	4500	μmhos

Triode Unit as Oscillator**CHARACTERISTICS**

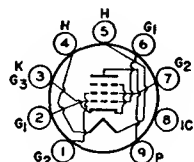
Plate Supply Voltage	190	volts
Plate Circuit Resistance	8200	ohms
Grid Circuit Resistance	10000	ohms
Oscillator Voltage	4.5	volts (rms)
Plate Current	12	mA
Transconductance	3500	μmhos

6GT5

Refer to chart at end of section.

6GT5A**17GT5A****BEAM POWER TUBE**

Novar type used as horizontal-deflection amplifier in television receivers. Outlines section, 31A; requires novar 9-contact socket. For curve of average characteristics, refer to type 6GW6. Type 17GT5A is identical with type 6GT5A except for heater ratings.

**9NZ**

	6GT5A	17GT5A	
Heater Voltage (ac/dc)	6.3	16.8	volts
Heater Current	1.2	0.45	ampere
Heater Warm-up Time (Average)	—	11	seconds
Heater-Cathode Voltage:			
Peak value	±200 max	±200 max	volts
Average value	100 max	100 max	volts
Direct Interelectrode Capacitances (Approx.):			
Grid No.1 to Plate		0.26	pF
Grid No.1 to Cathode, Heater, Grid No.2, and Grid No.3		15	pF
Plate to Cathode, Heater, Grid No.2, and Grid No.3		6.5	pF

Class A₁ Amplifier**CHARACTERISTICS**

	Triode Connection	Pentode Connection	
Plate Voltage	150	60 250	volts
Grid-No.2 (Screen-Grid) Voltage	150	150 150	volts
Grid-No.1 (Control-Grid) Voltage	—22.5	0 —22.5	volts
Mu Factor, Grid No.2 to Grid No.1	4.4	—	—
Plate Resistance (Approx.)	—	15000	ohms
Transconductance	—	7100	μmhos
Plate Current	—	390* 70	mA
Grid-No.2 Current	—	32* 2.1	mA
Grid-No.1 Voltage (Approx.) for plate current of 1 mA	—	— —42	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.

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