

Grid-No.2 Input:

For grid-No.2 voltages up to 165 volts

For grid-No.2 voltages between 165 and 330 volts

— 0.55 watt
— See curve page 300

CHARACTERISTICS

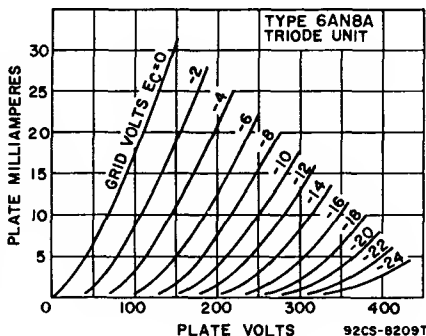
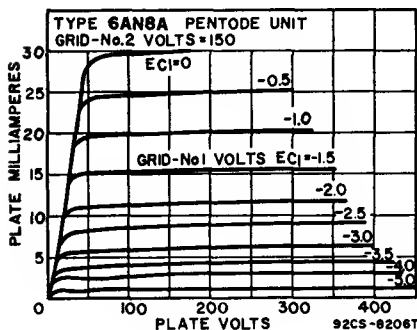
Plate Supply Voltage	150	125	volts
Grid-No.2 Supply Voltage	—	125	volts
Grid-No.1 Voltage	—3	—	volts
Cathode-Bias Resistor	—	56	ohms
Amplification Factor	21	—	
Plate Resistance (Approx.)	4700	170000	ohms
Transconductance	4500	7800	μmhos
Plate Current	15	12	mA
Grid-No.2 Current	—	3.8	mA
Grid-No.1 Voltage (Approx.) for plate current of 20 μA	—17	—6	volts
Grid-No.1 Voltage (Approx.) for plate current of 1.6 mA	—	—3	volts

MAXIMUM CIRCUIT VALUES

Grid-No.1-Circuit Resistance:*

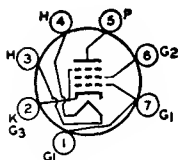
For fixed-bias operation 0.5 0.25 megohm
For cathode-bias operation 1 1 megohm

* If either unit is operating at maximum rated conditions, grid-No.1-circuit resistance for both units should not exceed the stated values.



Refer to chart at end of section.

6AQ5



7BZ

BEAM POWER TUBE

6AQ5A

5AQ5, 12AQ5

Miniature type used as output amplifier primarily in automobile receivers and in ac-operated receivers and, triode-connected, as a vertical-deflection amplifier in television receivers. Outlines section, 5D; requires miniature 7-contact socket. Within its maximum ratings, the performance of this type is equivalent to that of larger types 6V6 and 6V6GTA. Types 5AQ5 and 12AQ5 are identical with type 6AQ5A except for heater ratings.

Heater Voltage (ac/dc)	5AQ5 4.7	6AQ5A 6.3	12AQ5 12.6	volts
Heater Current	0.6	0.45	0.225	ampere
Heater Warm-up Time (Average)	11	11	—	seconds
Heater-Cathode Voltage:				
Peak value	±200 max	±200 max	±200 max	volts
Average value	100 max	100 max	100 max	volts
Direct Interelectrode Capacitances (Approx.):				
Grid No.1 to Plate			0.4	pF
Grid No.1 to Cathode, Heater, Grid No.2, and Grid No.3			8	pF
Plate to Cathode, Heater, Grid No.2, and Grid No.3			8.5	pF

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

Plate Voltage	275	volts
Grid-No.2 (Screen-Grid) Voltage	275	volts
Plate Dissipation	12	watts
Grid-No.2 Input	2	watts
Bulb Temperature (At hottest point)	250	°C

CHARACTERISTICS (Triode Connection)

Plate Voltage	250	volts
Grid-No.1 Voltage	-12.5	volts
Amplification Factor	9.5	
Plate Resistance (Approx.)	1970	ohms
Transconductance	4800	μmhos
Plate Current	49.5	mA
Grid-No.1 Voltage (Approx.) for plate current of 0.5 mA	-37	volts

TYPICAL OPERATION

Same as for type 6V6GTA within the limitations of the maximum ratings.

MAXIMUM CIRCUIT VALUES

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

Vertical Deflection Amplifier (Triode Connection)*

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

MAXIMUM RATINGS (Design-Maximum Values)

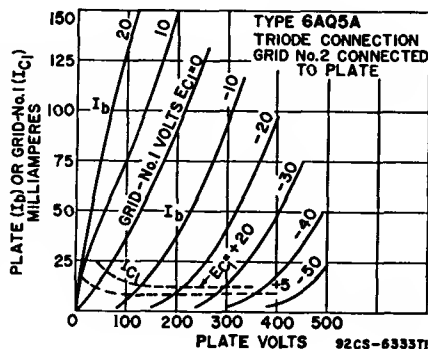
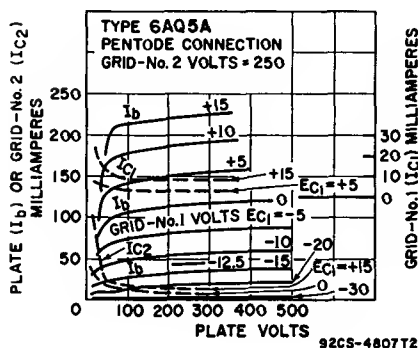
DC Plate Voltage	275	volts
Peak Positive-Pulse Plate Voltage#	1100	volts
Peak Negative-Pulse Grid-No.1 (Control-Grid) Voltage	275	volts
Peak Cathode Current	115	mA
Average Cathode Current	40	mA
Plate Dissipation	10	watts
Bulb Temperature (At hottest point)	250	°C

MAXIMUM CIRCUIT VALUE

Grid-No.1-Circuit Resistance, for cathode-bias operation	2.2	megohms
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* Grid No.2 connected to plate.

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



6AQ6

Refer to chart at end of section.

6AQ7GT

Refer to chart at end of section.

6AQ8

Refer to chart at end of section.