

Semiremote-Cutoff Pentode

9-PIN MINIATURE TYPE

GENERAL DATA

Electrical:

Heater Characteristics and Ratings (*Design-Center Values*):Voltage (AC or DC) 6.3 ± 0.6 volts

Current at heater volts = 6.3 0.300 amp

Peak heater-cathode voltage:

Heater negative with

respect to cathode. 150 max. volts

Heater positive with

respect to cathode. 150 max. volts

Direct Interelectrode Capacitances:^aGrid No.1 to plate. 0.005 max. μf Grid No.1 to cathode, grid No.3,
grid No.2, internal shield,
and heater. 9 μf Plate to cathode, grid No.3,
grid No.2, internal shield,
and heater. 3 μf Characteristics, Class A₁ Amplifier:

Plate Voltage 200 volts

Grid No.3 *Connected to cathode at socket*

Grid-No.2 Voltage 90 volts

Grid-No.1 Voltage -2 volts

Plate Resistance (Approx.) 0.5 megohm

Transconductance. 12500 μmhos

Plate Current 12 ma

Grid-No.2 Current 4.5 ma

Mechanical:

Operating Position. Any

Type of Cathode Coated Unipotential

Maximum Overall Length. 2-13/32"

Maximum Seated Length 2-5/32"

Length, Base Seat to Bulb Top (Excluding tip) . 1-25/32" $\pm$ 3/32"

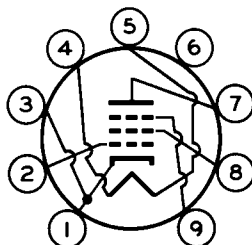
Diameter. 0.750" to 0.875"

Bulb. T6-1/2

Base. Small-Button Noval 9-Pin (JEDEC No.E9-1)

Basing Designation for BOTTOM VIEW. 9AQ

Pin 1 - Cathode
 Pin 2 - Grid No.1
 Pin 3 - Cathode
 Pin 4 - Heater
 Pin 5 - Heater



Pin 6 - Internal
 Shield
 Pin 7 - Plate
 Pin 8 - Grid No.2
 Pin 9 - Grid No.3



6EH7

AMPLIFIER — Class A₁

Maximum Ratings, Design-Center Values:

PLATE SUPPLY VOLTAGE.	550 max.	volts
PLATE VOLTAGE	250 max.	volts
GRID No.3 (SUPPRESSOR GRID) . . .	<i>Connect to cathode at socket</i>	
GRID No.2 (SCREEN-GRID) SUPPLY VOLTAGE. . .	550 max.	volts
GRID-No.2 VOLTAGE	250 max.	volts
CATHODE CURRENT	20 max.	ma
GRID-No.2 INPUT	0.65 max.	watt
PLATE DISSIPATION	2.5 max.	watts

Typical Operation:

Plate Voltage	200	200	200	200	volts
Grid No.3	<i>Connected to cathode at socket</i>				
Grid-No.2 Supply Voltage. .	200	200	200	200	volts
Grid-No.2 Series Resistor .	22000	22000	22000	22000	ohms
Grid-No.1 Voltage	-19.5	-9.5	-6.5	-2	volts
Transconductance.	125	625	1250	12500	μ mhos
RMS Grid-No.1 Voltage for cross-modulation factor = 0.01.	450	160	100	—	mv

Maximum Circuit Values:

Grid-No.1-Circuit Resistance.	1 max.	megohm
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^a Without external shield.

