

6EH7

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:^a

Grid No.1 to plate 0.005 max. μmf

Grid No.1 to cathode, grid No.3, grid No.2, internal shield, and heater 9 μmf

Plate to cathode, grid No.3, grid No.2, internal shield, and heater 3 μmf

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"

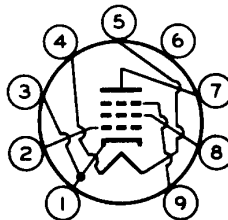
Diameter 0.750" to 0.875"

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



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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	μmhos
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.

