

Sharp-Cutoff Pentode

9-PIN MINIATURE TYPE FRAME-GRID CONSTRUCTION

For Use as High-Gain Intermediate-Frequency-Amplifier Tube in Television Receivers. No External Shield Required. Cutoff Characteristic Approaching Semiremote.

GENERAL DATA

Electrical:

Heater Characteristics and Ratings:

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	200 max.	volts
Heater positive with respect to cathode	200 ^a max.	volts

Direct Interelectrode Capacitances:^b

Grid No.1 to plate	0.019 max.	pf
Grid No.1 to cathode, grid No.3 & internal shield, grid No.2, and heater	8.2	pf
Plate to cathode, grid No.3 & internal shield, grid No.2, and heater	3.0	pf

Characteristics, Class A₁ Amplifier:

Plate Supply Voltage	125	volts
Grid-No.3 Voltage	0	volts
Grid-No.2 Supply Voltage	125	volts
Grid-No.1 Supply Voltage	0	volts
Cathode Resistor	56	ohms
Plate Resistance (Approx.)	160000	ohms
Transconductance	14000	μmhos
Plate Current	15	ma
Grid-No.2 Current	4	ma
Grid-No.1 Voltage (Approx.) for transconductance (μmhos) = 600	-4.5	volts

Mechanical:

Operating Position	Any
Type of Cathode	Coated Unipotential
Maximum Overall Length	2-3/16"
Maximum Seated Length	1-15/16"
Length, Base Seat to Bulb Top (Excluding tip)	1-9/16" ± 3/32"
Diameter	0.750" to 0.875"
Dimensional Outline	See <i>General Section</i>
Bulb	T6-1/2
Base	Small-Button Noval 9-Pin (JEDEC No.E9-1)



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Basing Designation for BOTTOM VIEW. 9PM

- Pin 1 -Cathode
- Pin 2 -Grid No.1
- Pin 3 -Cathode
- Pin 4 -Heater
- Pin 5 -Heater
- Pin 6 -No Internal Connection



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

AMPLIFIER — Class A₁

Maximum Ratings, Design-Maximum Values:

- PLATE VOLTAGE 330 max. volts
- GRID-NO.3 (SUPPRESSOR-GRID) VOLTAGE:
 - Positive value. 0 max. volts
- GRID-NO.2 (SCREEN-GRID) SUPPLY VOLTAGE. 330 max. volts
- GRID-NO.2 VOLTAGE See *Grid-No.2 Input Rating Chart*
at front of Receiving Tube Section
- GRID-NO.1 (CONTROL-GRID) VOLTAGE:
 - Positive-bias value 0 max. volts
- GRID-NO.2 INPUT:
 - For grid-No.2 voltages
up to 165 volts 0.6 max. watt
 - For grid-No.2 voltages
between 165 and 330 volts . See *Grid-No.2 Input Rating Chart*
at front of Receiving Tube Section
- PLATE DISSIPATION 2.5 max. watts

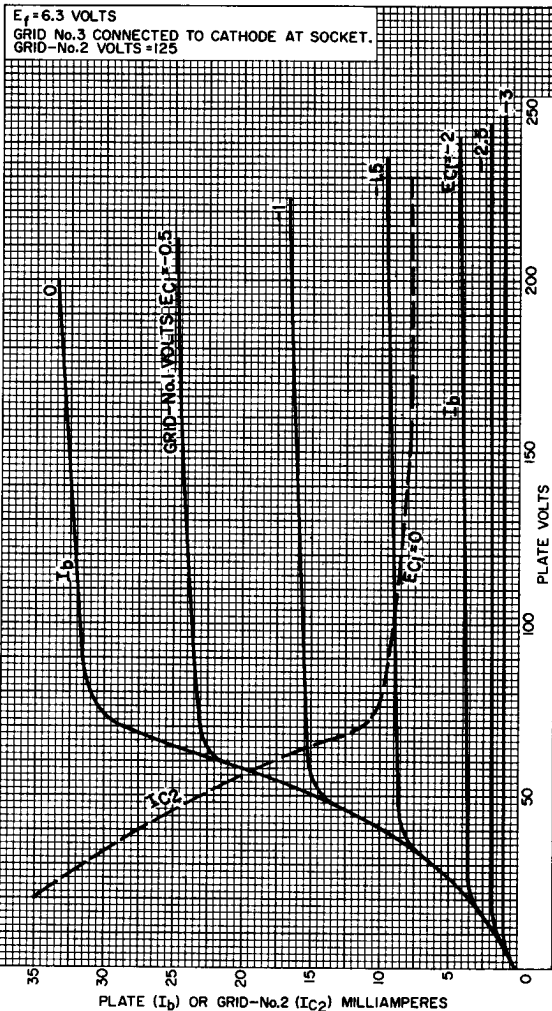
Maximum Circuit Values:

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

^a The dc component must not exceed 100 volts.
^b without external shield.



AVERAGE CHARACTERISTICS



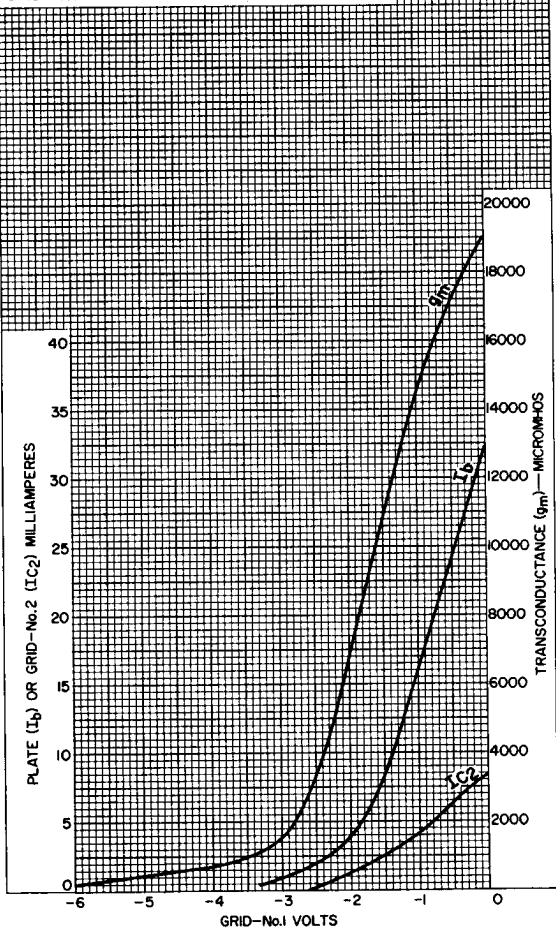
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AVERAGE CHARACTERISTICS

$E_f = 6.3$ VOLTS
PLATE VOLTS = 125
GRID No. 3 CONNECTED TO CATHODE AT SOCKET.
GRID - No. 2 VOLTS = 125



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