

4HT6

Sharp-Cutoff Pentode

9-PIN MINIATURE TYPE

GENERAL DATA

Electrical:

Heater Characteristics and Ratings:

Current	0.450 ± 0.030	amp
Voltage (AC or DC) at heater amperes = 0.450	4.2	volts
Warm-up time (Average)	11	sec
Peak heater-cathode voltage:		
Heater negative with respect to cathode	200 max.	volts
Heater positive with respect to cathode	200 max.	volts

Direct Interelectrode Capacitances:

	<i>Without External Shield</i>	<i>With External Shield^a</i>	
Grid No.1 to plate	0.031	0.024	pf
Grid No.1 to cathode, grid No.3 & internal shield, grid No.2, and heater	8.7	8.7	pf
Plate to cathode, grid No.3 & internal shield, grid No.2, and heater	2.15	3.0	pf

Characteristics, Class A₁ Amplifier:

Plate Supply Voltage	125	volts
Grid No.3 (Suppressor Grid)	<i>Connected to cathode at socket</i>	
Grid-No.2 Supply Voltage	125	volts
Cathode Resistor	56	ohms
Plate Resistance (Approx.)	0.143	megohm
Transconductance	14000	μmhos
Plate Current	15	ma
Grid-No.2 Current	4	ma
Grid-No.1 Voltage (Approx.) for transconductance (μmhos) = 100	-4.5	volts
Grid-No.1 Voltage (Approx.) for transconductance (μmhos) = 300	-3.5	volts

Mechanical:

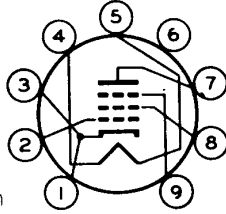
Operating Position	Any
Type of Cathode	Coated Unipotential
Maximum Overall Length	2-3/16"
Maximum Seated Length	1-15/16"
Length, Base Seat to Bulb Top (Excluding tip)	1-9/16" ± 3/32"
Diameter	0.750" to 0.875"
Dimensional Outline	See <i>General Section</i>
Bulb	T6-1/2
Base	Small-Button Noval 9-Pin (JEDEC 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. 250 max. volts
- GRID-No.2 (SCREEN-GRID) SUPPLY VOLTAGE . . . 250 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:

- Negative-bias value. 50 max. volts
- CATHODE CURRENT. 25 max. ma

GRID-No.2 INPUT:

- For grid-No.2 voltages up to 125 volts . . 0.6 max. watt
- For grid-No.2 voltages between 125 and 250 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 with JEDEC shield No. 315 connected to ground.

