

4HM6

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 amp- eres = 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.)	0.156	megohm
Transconductance	15000	μmhos
Plate Current	13	ma
Grid No.2 Current	3.2	ma
Grid No.1 Voltage, (Approx.) for transconductance (μmhos) = 100	-3	volts

Mechanical:

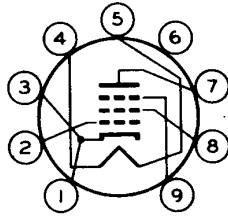
Operating Position	Any
Type of Cathode	Coated Unipotential
Maximum Overall Length	2-3/16"
Maximum Seated Length	1-15/16"
Length, Base Seat to Bulb Top (Excluding tip)	1-9/16" ± 3/32"
Diameter	0.750" to 0.875"
Dimensional Outline	See <i>General Section</i>
Bulb	T6-1/2
Base	Small-Button Noval 9-Pin (JEDEC 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.

