

Sharp-Cutoff Pentode

9-PIN MINIATURE TYPE

GENERAL DATA

Electrical:

Heater Characteristics and Ratings:

Current.	0.450 ± 0.030	amp
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Voltage (AC or DC) at heater amperes = 0.450	4.2	volts
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Warm-up time (Average)	11	sec
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Peak heater-cathode voltage:

Heater negative with respect to cathode	200 max.	volts
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Heater positive with respect to cathode	200 max.	volts
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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
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Plate to cathode, grid No.3 & internal shield, grid No.2, and heater	2.15	3.0	pf
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Characteristics, Class A₁ Amplifier:

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

Operating Position	Any
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Type of Cathode.	Coated Unipotential
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Maximum Overall Length	2-3/16"
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Maximum Seated Length.	1-15/16"
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Length, Base Seat to Bulb Top (Excluding tip).	1-9/16" ± 3/32"
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Diameter	0.750" to 0.875"
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Dimensional Outline.	See <i>General Section</i>
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Bulb	T6-1/2
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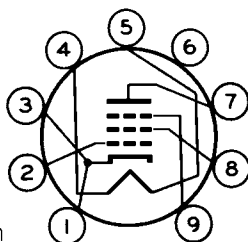
Base	Small-Button Noval 9-Pin (JEDEC No.E9-1)
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4HT6

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.