

Sharp-Cutoff Pentode

7-PIN MINIATURE TYPE

GENERAL DATA

Electrical:

Heater Characteristics and Ratings:

Voltage (AC or DC) 20.0 ± 1.0 volts

Current at heater volts = 20.0 0.050 amp

Peak heater-cathode voltage:

Heater negative with

respect to cathode. 100 max. volts

Heater positive with

respect to cathode. 100 max. volts

Direct Interelectrode Capacitances:^a

Grid No.1 to plate. 0.01 pf

Grid No.1 to cathode & grid No.3 &
internal shield, grid No.2, and
heater. 4.0 pf

Plate to cathode & grid No.3 &
internal shield, grid No.2, and
heater. 2.8 pf

Characteristics, Class A₁ Amplifier:

Plate Supply Voltage. 120 volts

Grid-No.2 Supply Voltage. 120 volts

Cathode Resistor^b 200 ohms

Plate Resistance (Approx.) 0.34 megohm

Transconductance. 5000 μ hos

Plate Current 7 ma

Grid-No.2 Current 2.2 ma

Grid-No.1 Voltage for maximum plate

$\mu a = 200$ -10 volts

Mechanical:

Operating Position. Any

Type of Cathode Coated Unipotential

Maximum Overall Length. 1-3/4"

Maximum Seated Length 1-1/2"

Length, Base Seat to Bulb Top (Excluding tip). . . 1-1/8" $\pm$ 3/32"

Diameter. 0.650" to 0.750"

Dimensional Outline See *General Section*

Bulb. T6-1/2

Base. Small-Button Miniature 7-Pin (JEDEC No.E7-1)

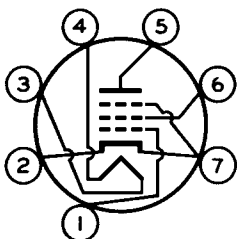
Basing Designation for BOTTOM VIEW. 7BD

Pin 1-Grid No.1

Pin 2-Cathode,
Grid No.3

Pin 3-Heater

Pin 4-Heater



Pin 5-Plate

Pin 6-Grid No.2

Pin 7-Cathode,
Grid No.3



AMPLIFIER — Class A₁

Maximum Ratings, *Absolute-Maximum Values:*

PLATE VOLTAGE	180 max. volts
GRID-No.2 (SCREEN-GRID) SUPPLY VOLTAGE. . .	180 max. volts
GRID-No.2 VOLTAGE	See <i>Grid-No.2 Input Rating Chart</i> 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 90 volts.	0.5 max. watt
For grid-No.2 voltages be-	
tween 90 and 180 volts. .See <i>Grid-No.2 Input Rating Chart</i>	at front of Receiving Tube Section
PLATE DISSIPATION	1.7 max. watts

^a With external shield JEDEC No.316 connected to cathode.

^b Fixed-bias operation is not recommended.