408A

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

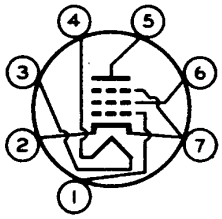
Characteristics, Class A_1 Amplifier:

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	μmhos
Plate Current	7	ma
Grid-No.2 Current	2.2	ma
Grid-No.1 Voltage for maximum plate μa = 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" ± 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

408A

AMPLIFIER — Class A_1

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 *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 90 volts	0.5 max.	watt
For grid-No.2 voltages between 90 and 180 volts	See *Grid-No.2 Input Rating Chart* 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.