

## Sharp-Cutoff Pentode

## 9-PIN MINIATURE TYPE

## GENERAL DATA

**Electrical:**Heater Characteristics and Ratings (*Absolute-Maximum Values*):

Voltage (AC or DC) . . . . . 6.3 ± 0.6 volts

Current at heater volts = 6.3 . . . . . 0.300 amp

Peak heater-cathode voltage:

Heater negative with  
respect to cathode . . . . . 55 max. voltsHeater positive with  
respect to cathode . . . . . 55 max. volts

Direct Interelectrode Capacitances:

	<i>Without External Shield</i>	<i>With External Shield<sup>a</sup></i>	
Grid No.1 to plate . . . . .	0.05 max.	0.04 max.	μf
Grid No.1 to cathode & grid No.3 & internal shield, grid No.2, and heater . . . . .	7	7.1	μf
Plate to cathode & grid No.3 & internal shield, grid No.2, and heater . . . . .	2.5	2.9	μf

**Characteristics, Class A<sub>1</sub> Amplifier:**

		<b>b</b>	
Plate Supply Voltage . . . . .	150	160	volts
Grid-No.2 Supply Voltage . . . . .	150	160	volts
Grid-No.1 Voltage . . . . .	-	8.5	volts
Cathode Resistor . . . . .	110	600	ohms
Transconductance . . . . .	12500	12500	μmhos
Plate Current . . . . .	13	13	ma
Grid-No.2 Current . . . . .	4.5	4.5	ma

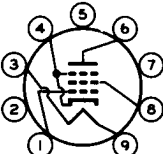
**Mechanical:**

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 . . . . .	0.750" to 0.875"
Dimensional Outline . . . . .	See <i>General Section</i>
Bulb . . . . .	T6-1/2



# 5847/404A

Base. . . . . Small-Button Noval 9-Pin (JEDEC No. E9-1)  
Basing Designation for BOTTOM VIEW. . . . . 9X

Pin 1 - Grid No.1		Pin 5 - No Internal Connection
Pin 2 - No Internal Connection		Pin 6 - Plate
Pin 3 - Heater		Pin 7 - No Internal Connection
Pin 4 - Cathode, Grid No.3, Internal Shield		Pin 8 - Grid No.2
		Pin 9 - Heater

## AMPLIFIER — Class A<sub>1</sub>

### Maximum Ratings, Absolute-Maximum Values:

PLATE VOLTAGE . . . . .	200 max.	volts
GRID-No.2 (SCREEN-GRID) VOLTAGE . . . . .	165 max.	volts
CATHODE CURRENT . . . . .	40 max.	ma
GRID-No.2 INPUT . . . . .	0.85 max.	watt
PLATE DISSIPATION . . . . .	3.3 max.	watts

### Maximum Circuit Values:

Grid-No.1-Circuit Resistance. . . . . 0.1 max. megohm

<sup>a</sup> With external shield JEDEC No.315 connected to cathode.

<sup>b</sup> Operating conditions to minimize gain variations due to supply-voltage fluctuations.

