

## Power Pentode

## 7-PIN MINIATURE

**Electrical:**

## Heater Ratings and Characteristics:

Voltage (AC or DC) . . . . .	6.3 ± 0.6 volts
Current at heater volts = 6.3 . . . . .	0.380 amp
Peak heater-cathode voltage:	
Heater negative with respect to cathode . . . . .	200 max. volts
Heater positive with respect to cathode . . . . .	200 <sup>a</sup> max. volts

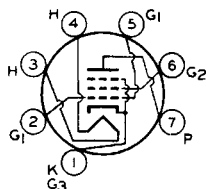
Direct Interelectrode Capacitances:<sup>b</sup>

Grid No.1 to plate . . . . .	0.24	pf
Input: G <sub>1</sub> to (K+G <sub>3</sub> ,G <sub>2</sub> ,H) . . . . .	8.5	pf
Output: P to (K+G <sub>3</sub> ,G <sub>2</sub> ,H) . . . . .	3.8	pf

**Mechanical:**

Operating Position . . . . .	Any
Type of Cathode . . . . .	Coated Unipotential
Maximum Overall Length . . . . .	2-1/8"
Maximum Seated Length . . . . .	1-7/8"
Length, Base Seat to Bulb Top (Excluding tip) . . . . .	1-1/2" ± 3/32"
Diameter . . . . .	0.650" to 0.750"
Dimensional Outline . . . . .	See <i>General Section</i>
Bulb . . . . .	Small-Button Miniature 7-Pin (JEDEC No.E7-1)
Basing Designation for BOTTOM VIEW . . . . .	7CV

- Pin 1 - Cathode, Grid No.3
- Pin 2 - Grid No.1
- Pin 3 - Heater
- Pin 4 - Heater
- Pin 5 - Grid No.1
- Pin 6 - Grid No.2
- Pin 7 - Plate



Bulb Temperature (At hottest point on bulb surface) . . . . . 200° C

**AMPLIFIER —Class A<sub>1</sub>****Maximum Ratings, Design-Maximum Values:**

Plate Voltage . . . . .	300 max. volts
Grid-No.2 (Screen-Grid) Voltage . . . . .	300 max. volts
Grid-No.1 (Control-Grid) Voltage:	
Positive-bias value . . . . .	0 max. volts
Average Cathode Current . . . . .	30 max. ma
Grid-No.2 Input . . . . .	1.1 max. watts
Plate Dissipation . . . . .	4.8 max. watts

**Typical Operation and Characteristics:**

	No	Bypass	
	By	Capacitor	
Plate Supply Voltage . . . . .	250	250	volts
Grid-No.2 Supply Voltage . . . . .	250	250	volts



# 6GZ5

	<i>No</i>	<i>Bypass</i>	
	<i>Bypassing</i>	<i>Capacitor</i>	
Cathode Resistor. . . . .	270	270	ohms
Peak AF Grid-No.1 Voltage . . . . .	9.8	2	volts
Zero-Signal Plate Current . . . . .	16	16	ma
Max.-Signal Plate Current . . . . .	16	16	ma
Zero-Signal Grid-No.2 Current . . . . .	2.7	2.7	ma
Max.-Signal Grid-No.2 Current . . . . .	5	5	ma
Plate Resistance (Approx.). . . . .	-	0.15	megohm
Transconductance. . . . .	-	8400	$\mu$ hos
Load Resistance . . . . .	15000	15000	ohms
Total Harmonic Distortion . . . . .	10	10	percent
Power Output. . . . .	1.8	1.1	watts

### Maximum Circuit Values:

Grid-No.1-Circuit Resistance:

For fixed-bias operation. . . . .	0.5 max.	megohm
For cathode-bias operation. . . . .	1 max.	megohm

<sup>a</sup> The dc component must not exceed 100 volts.

<sup>b</sup> Without external shield.

