

Beam Power Tube

7-PIN MINIATURE TYPE

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage (AC or DC)	6.3	volts
Current	1.2	amp

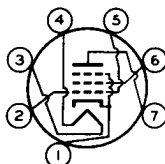
Direct Interelectrode Capacitances (Approx.):^a

Grid No.1 to plate.	0.5	$\mu\mu\text{f}$
Grid No.1 to cathode & grid No.3, grid No.2, and heater	15	$\mu\mu\text{f}$
Plate to cathode & grid No.3, grid No.2, and heater	9	$\mu\mu\text{f}$

Mechanical:

Operating Position.	Any
Maximum Overall Length.	2-5/8"
Maximum Seated Length	2-3/8"
Length, Base Seat to Bulb Top (Excluding tip).	2" $\pm$ 3/32"
Diameter.	0.650" to 0.750"
Dimensional Outline	See <i>General Section</i>
Bulb.	T5-1/2
Base.	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

AMPLIFIER — Class A₁

Maximum Ratings, Design-Center Values:

PLATE VOLTAGE	130	max.	volts
GRID-No.2 (SCREEN-GRID) VOLTAGE	130	max.	volts
GRID-No.1 (CONTROL-GRID) VOLTAGE:			
Positive-bias value	0	max.	volts
GRID-No.2 INPUT	1.4	max.	watts
PLATE DISSIPATION	5	max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode	200	max.	volts
Heater positive with respect to cathode	200 ^b	max.	volts
BULB TEMPERATURE (At hottest point on bulb surface).	180	max.	°C

Typical Operation and Characteristics:

Plate Voltage	110	125	volts
Grid-No.2 Voltage	110	125	volts



6CA5

Grid-No.1 Voltage	-4	-4.5	volts
Peak AF Grid-No.1 Voltage	4	4.5	volts
Zero-Signal Plate Current	32	37	ma
Max.-Signal Plate Current	31	36	ma
Zero-Signal Grid-No.2 Current	3.5	4	ma
Max.-Signal Grid-No.2 Current	7.5	11	ma
Plate Resistance (Approx.)	16000	15000	ohms
Transconductance	8100	9200	μ hos
Load Resistance	3500	4500	ohms
Total Harmonic Distortion	5	6	%
Max.-Signal Power Output	1.1	1.5	watts

Maximum Circuit Values:

Grid-No.1-Circuit Resistance:

For fixed-bias operation	0.1 max.	megohm
For cathode-bias operation	0.5 max.	megohm

^a Without external shield.

^b The dc component must not exceed 100 volts.

