



25CA5

BEAM POWER TUBE

7-PIN MINIATURE TYPE

25CA5

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage (AC or DC) 25 volts

Current 0.3 amp

Direct Interelectrode Capacitances (Approx.):^oGrid No.1 to plate. 0.5 μ fGrid No.1 to cathode & grid No.3,
grid No.2, and heater 15 μ fPlate to cathode & grid No.3,
grid No.2, and heater 9 μ 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"

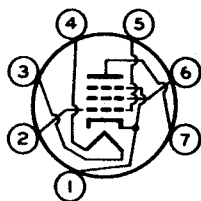
Diameter. 0.650" to 0.750"

Dimensional Outline See General Section

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 - HeaterPin 4 - Heater
Pin 5 - Grid No.1
Pin 6 - Grid No.2
Pin 7 - PlateAMPLIFIER — 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[▲] 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

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

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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 mhos
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

○ Without external shield.

▲ The dc component must not exceed 100 volts.