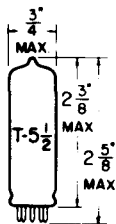


## TUNG-SOL

## PENTODE

## MINIATURE TYPE



GLASS BULB

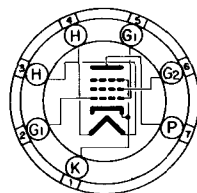
COATED UNIPOTENTIAL CATHODE

HEATER

50 VOLTS 0.15 AMP.

AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW

MINIATURE BUTTON  
7 PIN BASE

7CV

THE 50CA5 IS A BEAM PENTODE USING THE 7 PIN MINIATURE CONSTRUCTION. IT IS DESIGNED PRIMARILY FOR USE IN THE AUDIO FREQUENCY POWER OUTPUT STAGE OF TELEVISION AND RADIO RECEIVERS. IT FEATURES HIGH POWER SENSITIVITY AT RELATIVELY LOW PLATE AND SCREEN VOLTAGES. EXCEPT FOR HEATER RATINGS, IT IS IDENTICAL TO THE 6AC5.

## DIRECT INTERELECTRODE CAPACITANCES

WITH NO EXTERNAL SHIELD

|                  |     |            |
|------------------|-----|------------|
| GRID #1 TO PLATE | 0.5 | $\mu\mu f$ |
| INPUT            | 15  | $\mu\mu f$ |
| OUTPUT           | 9   | $\mu\mu f$ |

## RATINGS

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

|                                         |     |             |
|-----------------------------------------|-----|-------------|
| HEATER VOLTAGE                          | 50  | VOLTS       |
| MAXIMUM HEATER-CATHODE VOLTAGE:         |     |             |
| HEATER POSITIVE WITH RESPECT TO CATHODE |     |             |
| TOTAL DC AND PEAK                       | 200 | VOLTS       |
| DC                                      | 100 | VOLTS       |
| HEATER NEGATIVE WITH RESPECT TO CATHODE |     |             |
| TOTAL DC AND PEAK                       | 200 | VOLTS       |
| MAXIMUM PLATE VOLTAGE                   | 130 | VOLTS       |
| MAXIMUM GRID #2 VOLTAGE                 | 130 | VOLTS       |
| MAXIMUM POSITIVE DC GRID #1 VOLTAGE     | 0   | VOLTS       |
| MAXIMUM PLATE DISSIPATION               | 5.0 | WATTS       |
| MAXIMUM GRID #2 DISSIPATION             | 1.4 | WATTS       |
| MAXIMUM GRID #1 CIRCUIT RESISTANCE:     |     |             |
| FIXED BIAS                              | 0.1 | MEGOHM      |
| CATHODE BIAS                            | 0.5 | MEGOHM      |
| BULB TEMPERATURE AT HOTTEST POINT       | 180 | $^{\circ}C$ |

CONTINUED ON FOLLOWING PAGE

## TUNG-SOL

CONTINUED FROM PRECEDING PAGE

## TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS  $A_1$  AMPLIFIER

|                                          |        |        |         |
|------------------------------------------|--------|--------|---------|
| HEATER VOLTAGE                           | 50     |        | VOLTS   |
| HEATER CURRENT                           | 0.15   |        | AMP.    |
| PLATE VOLTAGE                            | 110    | 125    | VOLTS   |
| GRID #2 VOLTAGE                          | 110    | 125    | VOLTS   |
| GRID #1 VOLTAGE                          | -4.0   | -4.5   | VOLTS   |
| PEAK AF GRID #1 VOLTAGE                  | 4.0    | 4.5    | VOLTS   |
| PLATE RESISTANCE (APPROX.)               | 16 000 | 15 000 | OHMS    |
| TRANSCONDUCTANCE                         | 8 100  | 9 200  | μMHOS   |
| ZERO-SIGNAL PLATE CURRENT                | 32     | 37     | MA.     |
| MAXIMUM SIGNAL PLATE CURRENT (APPROX.)   | 31     | 36     | MA.     |
| ZERO-SIGNAL GRID #2 CURRENT              | 3.5    | 4.0    | MA.     |
| MAXIMUM SIGNAL GRID #2 CURRENT (APPROX.) | 7.5    | 11     | MA.     |
| LOAD RESISTANCE                          | 3 500  | 4 500  | OHMS    |
| TOTAL HARMONIC DISTORTION (APPROX.)      | 5      | 6      | PERCENT |
| MAXIMUM SIGNAL POWER OUTPUT              | 1.1    | 1.5    | WATTS   |

