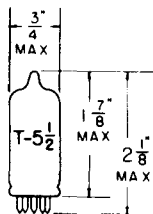


## TUNG-SOL

PENTODE  
MINIATURE TYPE

## GLASS BULB

MINIATURE BUTTON  
7 PIN BASE E7-1OUTLINE DRAWING  
JEDEC 5-2

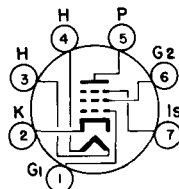
COATED UNIPOTENTIAL CATHODE

HEATER

5.6 VOLTS 0.45±.03 AMP.

AC OR DC

ANY MOUNTING POSITION



## BOTTOM VIEW

BASING DIAGRAM  
JEDEC 7CM

THE 5EW6 IS A SHARP CUTOFF PENTODE IN THE 7-PIN MINIATURE CONSTRUCTION AND HAS BEEN DESIGNED FOR INTERMEDIATE AMPLIFIER SERVICE IN TELEVISION RECEIVERS. EXCEPT FOR HEATER RATINGS AND HEATER WARM-UP TIME, THE 5EW6 IS IDENTICAL TO THE 6EW6.

## DIRECT INTERELECTRODE CAPACITANCES

|                         | WITH SHIELD <sup>A</sup> | WITHOUT SHIELD |     |
|-------------------------|--------------------------|----------------|-----|
| GRID #1 TO PLATE (MAX.) | 0.03                     | 0.04           | μuf |
| INPUT                   | 10.0                     | 10.0           | μuf |
| OUTPUT                  | 3.4                      | 2.4            | μuf |

## RATINGS

INTERPRETED ACCORDING TO DESIGN-MAXIMUM VALUES

|                                           |                         |         |
|-------------------------------------------|-------------------------|---------|
| HEATER VOLTAGE                            | 5.6                     | VOLTS   |
| MAXIMUM PLATE VOLTAGE                     | 330                     | VOLTS   |
| MAXIMUM SCREEN-SUPPLY VOLTAGE             | 330                     | VOLTS   |
| MAXIMUM SCREEN VOLTAGE                    | SEE SCREEN RATING CHART |         |
| MAXIMUM POSITIVE DC GRID #1 VOLTAGE       | 0                       | VOLTS   |
| MAXIMUM PLATE DISSIPATION                 | 3.1                     | WATTS   |
| MAXIMUM SCREEN DISSIPATION                | 0.65                    | WATTS   |
| MAXIMUM HEATER CATHODE VOLTAGE:           |                         |         |
| HEATER POSITIVE WITH RESPECT TO CATHODE   |                         |         |
| DC COMPONENT                              | 100                     | VOLTS   |
| TOTAL DC AND PEAK                         | 200                     | VOLTS   |
| HEATER NEGATIVE WITH RESPECT TO CATHODE   |                         |         |
| TOTAL DC AND PEAK                         | 200                     | VOLTS   |
| HEATER WARM-UP TIME <sup>A</sup> (AVG.) * | 11                      | SECONDS |

DESIGN-MAXIMUM RATINGS ARE LIMITING VALUES OF OPERATING AND ENVIRONMENTAL CONDITIONS APPLICABLE TO A BOGEY ELECTRON DEVICE OF A SPECIFIED TYPE AS DEFINED BY ITS PUBLISHED DATA, AND SHOULD NOT BE EXCEEDED UNDER THE WORST PROBABLE CONDITIONS. THE DEVICE MANUFACTURER CHOOSES THESE VALUES TO PROVIDE ACCEPTABLE SERVICEABILITY OF THE DEVICE, TAKING RESPONSIBILITY FOR THE EFFECTS OF CHANGES IN OPERATING CONDITIONS DUE TO VARIATIONS IN DEVICE CHARACTERISTICS. THE EQUIPMENT MANUFACTURER SHOULD DESIGN SO THAT INITIALLY AND THROUGHOUT LIFE NO DESIGN-MAXIMUM VALUE FOR THE INTENDED SERVICE IS EXCEEDED WITH A BOGEY DEVICE UNDER THE WORST PROBABLE OPERATING CONDITIONS WITH RESPECT TO SUPPLY-VOLTAGE VARIATION, EQUIPMENT COMPONENT VARIATION, EQUIPMENT CONTROL ADJUSTMENT, LOAD VARIATION, SIGNAL VARIATION, AND ENVIRONMENTAL CONDITIONS.

<sup>A</sup> WITH EXTERNAL SHIELD (IEIA 316) CONNECTED TO CATHODE.

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## TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A<sub>1</sub> AMPLIFIER

|                                                      |        |         |
|------------------------------------------------------|--------|---------|
| PLATE VOLTAGE                                        | 125    | VOLTS   |
| SUPPRESSOR, CONNECTED TO CATHODE AT SOCKET           |        |         |
| SCREEN VOLTAGE                                       | 125    | VOLTS   |
| CATHODE-BIAS RESISTOR                                | 56     | OHMS    |
| PLATE RESISTANCE (APPROX.)                           | 0.2    | MEGOHMS |
| TRANSCONDUCTANCE                                     | 14 000 | μMHOS   |
| PLATE CURRENT                                        | 11     | MA.     |
| SCREEN CURRENT                                       | 3.2    | MA.     |
| GRID #1 VOLTAGE (APPROX.) $I_b = 20 \mu\text{AMPS.}$ | -3.5   | VOLTS   |

\* HEATER WARM-UP TIME IS DEFINED AS THE TIME REQUIRED FOR THE VOLTAGE ACROSS THE HEATER TO REACH 80% OF ITS RATED VOLTAGE AFTER APPLYING 4 TIMES RATED HEATER VOLTAGE TO A CIRCUIT CONSISTING OF THE TUBE HEATER IN SERIES WITH A RESISTANCE OF VALUE 3 TIMES THE NOMINAL HEATER OPERATING RESISTANCE.

