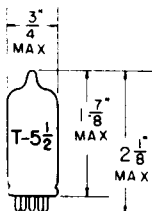


## TUNG-SOL

## PENTODE

MINIATURE TYPE



GLASS BULB

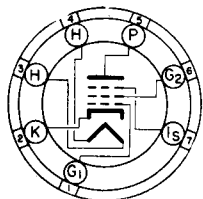
UNIPOTENTIAL CATHODE

HEATER

5.6 VOLTS 0.45±6% AMP.

AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW

SMALL-BUTTON MINIATURE  
7 PIN BASE

7CM

THE 5GM6 IS A SEMIREMOTE-CUTOFF PENTODE IN THE 7 PIN MINIATURE CONSTRUCTION. IT IS ESPECIALLY DESIGNED FOR USE IN GAIN-CONTROLLED PICTURE-IF STAGES OF TELEVISION RECEIVERS OPERATING AT INTERMEDIATE FREQUENCIES OF THE ORDER OF 40 MEGACYCLES.

## DIRECT INTERELECTRODE CAPACITANCES

WITHOUT EXTERNAL SHIELD

|                                                   |       |     |
|---------------------------------------------------|-------|-----|
| GRID #1 TO PLATE (MAX.)                           | 0.036 | μμf |
| GRID #1 TO CATHODE, INTERNAL SHIELD & G3, G2 & H. | 10    | μμf |
| PLATE TO CATHODE, INTERNAL SHIELD & G3, G2 & H.   | 2.4   | μμf |

## RATINGS

INTERPRETED ACCORDING TO DESIGN MAXIMUM SYSTEM

CLASS A<sub>1</sub> AMPLIFIER

|                                                                                          |                  |         |
|------------------------------------------------------------------------------------------|------------------|---------|
| HEATER VOLTAGE                                                                           | 5.6              | VOLTS   |
| MAXIMUM PLATE VOLTAGE                                                                    | 330              | VOLTS   |
| MAXIMUM GRID #3 (SUPPRESSOR) VOLTAGE                                                     | 0                | VOLTS   |
| MAXIMUM GRID #2 SUPPLY VOLTAGE                                                           | 330              | VOLTS   |
| MAXIMUM GRID #2 (SCREEN-GRID) VOLTAGE<br>(SEE JEDEC INPUT RATING CHART J5-C4-2)          |                  |         |
| MAXIMUM GRID #1 (CONTROL-GRID) VOLTAGE:                                                  |                  |         |
| POSITIVE BIAS VALUE                                                                      | 0                | VOLTS   |
| MAXIMUM PLATE DISSIPATION                                                                | 3.1              | WATTS   |
| MAXIMUM GRID #2 INPUT:                                                                   |                  |         |
| FOR GRID #2 VOLTAGES UP TO 165 VOLTS                                                     | 0.65             | WATT    |
| FOR GRID #2 VOLTAGES BETWEEN 165 AND 330 VOLTS<br>(SEE JEDEC INPUT RATING CHART J5-C4-2) |                  |         |
| MAXIMUM PEAK HEATER-CATHODE VOLTAGE:                                                     |                  |         |
| HEATER NEGATIVE WITH RESPECT TO CATHODE                                                  | 200              | VOLTS   |
| HEATER POSITIVE WITH RESPECT TO CATHODE                                                  | 200 <sup>A</sup> | VOLTS   |
| HEATER WARM-UP TIME (APPROX.)*                                                           | 11.0             | SECONDS |

<sup>A</sup>THE DC COMPONENT MUST NOT EXCEED 100 VOLTS.

CONTINUED ON FOLLOWING PAGE

## TUNG-SOL

CONTINUED FROM PRECEDING PAGE

## TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A<sub>1</sub> AMPLIFIER

|                                                             |                                |           |
|-------------------------------------------------------------|--------------------------------|-----------|
| HEATER VOLTAGE                                              | 5.6                            | VOLTS     |
| HEATER CURRENT                                              | 0.45±6%                        | AMP.      |
| PLATE SUPPLY VOLTAGE                                        | 125                            | VOLTS     |
| GRID #3                                                     | CONNECTED TO CATHODE AT SOCKET |           |
| GRID #2 SUPPLY VOLTAGE                                      |                                | 125 VOLTS |
| CATHODE RESISTOR                                            | 56                             | OHMS      |
| PLATE RESISTANCE (APPROX.)                                  | 0.2                            | MEGOHMS   |
| TRANSCONDUCTANCE                                            | 13 000                         | μMHOS     |
| PLATE CURRENT                                               | 14                             | MA.       |
| GRID #2 CURRENT                                             | 3.4                            | MA.       |
| GRID #1 VOLTAGE (APPROX.) FOR<br>TRANCONDUCTANCE = 60 μMHOS | -15                            | VOLTS     |

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.

**SIMILAR TYPE REFERENCE:** *Except for heater ratings and heater warm-up time, the 5GM6 is identical to the 4GM6 and the 6GM6.*

\*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.