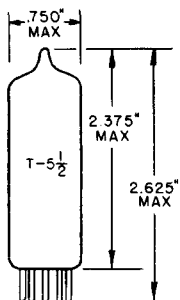


## TUNG-SOL

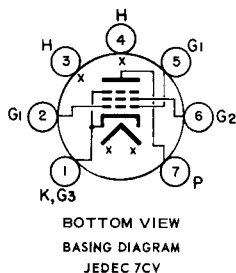
PENTODE  
MINIATURE TYPE

GLASS BULB  
SMALL-BUTTON MINIATURE  
7 PIN BASE E7-1  
OUTLINE DRAWING  
JEDEC 5-3

FOR USE IN  
AUDIO OUTPUT STAGES OF  
RADIO AND TV RECEIVERS  
AND PHONOGRAPHS

UNIPOTENTIAL CATHODE

ANY MOUNTING POSITION



THE 6EH5 IS A POWER PENTODE IN THE 7 PIN MINIATURE CONSTRUCTION. IT HAS BEEN SPECIFICALLY DESIGNED FOR USE IN THE AUDIO OUTPUT STAGE OF RADIO AND TELEVISION RECEIVERS AND PHONOGRAPHS. EXCEPT FOR HEATER CHARACTERISTICS AND RATINGS, IT IS IDENTICAL TO THE 12EH5, 25EH5 AND THE 50EH5.

**DIRECT INTERELECTRODE CAPACITANCES - APPROX.**  
WITHOUT EXTERNAL SHIELD

|                                             |      |    |
|---------------------------------------------|------|----|
| GRID 1 TO PLATE                             | 0.65 | pf |
| GRID 1 TO CATHODE & GRID 3, HEATER & GRID 2 | 17   | pf |
| PLATE TO CATHODE & GRID 3, HEATER & GRID 2  | 9    | pf |

**HEATER CHARACTERISTICS AND RATINGS**  
DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

|                                         |     |       |                  |       |
|-----------------------------------------|-----|-------|------------------|-------|
| AVERAGE CHARACTERISTICS                 | 6.3 | VOLTS | 1200             | MA.   |
| HEATER SUPPLY LIMITS:                   |     |       |                  |       |
| VOLTAGE OPERATION                       |     |       | 6.3 ± 0.6        | VOLTS |
| MAXIMUM PEAK HEATER-CATHODE VOLTAGE:    |     |       |                  |       |
| HEATER NEGATIVE WITH RESPECT TO CATHODE |     |       | 200              | VOLTS |
| HEATER POSITIVE WITH RESPECT TO CATHODE |     |       | 200 <sup>B</sup> | VOLTS |

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

**TUNG-SOL****MAXIMUM RATINGS**

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

**AMPLIFIER**

|                                                     |       |        |
|-----------------------------------------------------|-------|--------|
| PLATE VOLTAGE                                       | → 150 | VOLTS  |
| GRID 2 (SCREEN-GRID) VOLTAGE                        | → 130 | VOLTS  |
| PLATE DISSIPATION                                   | → 5.5 | WATTS  |
| GRID 2 INPUT                                        | → 2   | WATTS  |
| BULB TEMPERATURE (AT HOTTEST POINT ON BULB SURFACE) | 220   | °C     |
| GRID 1 CIRCUIT RESISTANCE:                          |       |        |
| FOR FIXED-BIAS OPERATION                            | 0.1   | MEGOHM |
| FOR CATHODE-BIAS OPERATION                          | 0.5   | MEGOHM |

**TYPICAL OPERATING CHARACTERISTICS****CLASS A1 AMPLIFIER**

|                              |        |         |
|------------------------------|--------|---------|
| PLATE SUPPLY VOLTAGE         | 110    | VOLTS   |
| GRID 2 SUPPLY VOLTAGE        | 115    | VOLTS   |
| CATHODE RESISTOR             | 62     | OHMS    |
| PEAK AF GRID 1 VOLTAGE       | 3      | VOLTS   |
| ZERO-SIGNAL PLATE CURRENT    | 42     | MA.     |
| SIGNAL PLATE CURRENT (MAX.)  | 42     | MA.     |
| ZERO-SIGNAL GRID 2 CURRENT   | 11.5   | MA.     |
| SIGNAL GRID 2 CURRENT (MAX.) | 14.5   | MA.     |
| TRANSCONDUCTANCE             | 14,600 | μMHOS   |
| PLATE RESISTANCE (APPROX.)   | 11,000 | OHMS    |
| LOAD RESISTANCE              | 3,000  | OHMS    |
| TOTAL HARMONIC DISTORTION    | 7      | PERCENT |
| SIGNAL POWER OUTPUT (MAX.)   | 1.4    | WATTS   |

**PUSH-PULL AF POWER AMPLIFIER - CLASS AB1**

VALUES ARE FOR TWO TUBES

|                                            |      |         |
|--------------------------------------------|------|---------|
| PLATE SUPPLY VOLTAGE                       | 140  | VOLTS   |
| GRID 2 SUPPLY VOLTAGE                      | 120  | VOLTS   |
| CATHODE RESISTOR                           | 68   | OHMS    |
| PEAK AF GRID 1 TO GRID 1 VOLTAGE           | 9.4  | VOLTS   |
| ZERO-SIGNAL PLATE CURRENT                  | 47   | MA.     |
| MAX. SIGNAL PLATE CURRENT                  | 51   | MA.     |
| ZERO-SIGNAL GRID 2 CURRENT                 | 11   | MA.     |
| MAX.-SIGNAL GRID 2 CURRENT                 | 17.7 | MA.     |
| EFFECTIVE LOAD RESISTANCE (PLATE TO PLATE) | 6000 | OHMS    |
| TOTAL HARMONIC DISTORTION                  | 5    | PERCENT |
| MAX.-SIGNAL POWER OUTPUT                   | 3.8  | WATTS.  |

→ INDICATES A CHANGE.

