

# TUNG-SOL

## PENTODE

### MINIATURE TYPE

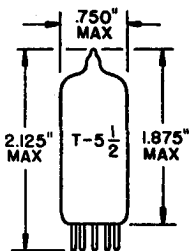
#### FOR

MOBILE COMMUNICATIONS

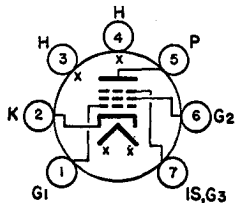
EQUIPMENT

COATED UNIPOTENTIAL CATHODE

ANY MOUNTING POSITION



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



BOTTOM VIEW  
BASING DIAGRAM  
JEDEC 7CM

THE 6661 IS A MINIATURE REMOTE-CUTOFF PENTODE DESIGNED FOR USE AS A WIDE-BAND HIGH-FREQUENCY AMPLIFIER.

THE 6661 MAY BE OPERATED WITHOUT SERIOUS DEGRADATION UNDER NORMAL VARIATIONS IN SUPPLY VOLTAGE AS ENCOUNTERED WITH AUTOMOTIVE ELECTRICAL SYSTEMS. ALTHOUGH THE TUBE WILL TOLERATE LARGE HEATER VOLTAGE VARIATIONS FOR SHORT PERIODS, HIGHER EQUIPMENT RELIABILITY CAN BE ACHIEVED WITH IMPROVED SUPPLY-VOLTAGE REGULATION.

THE ELECTRICAL CHARACTERISTICS OF THE 6661 ARE EQUIVALENT TO THE 6BH6.

### DIRECT INTERELECTRODE CAPACITANCES

|                          | WITH SHIELD <sup>A</sup> | WITHOUT SHIELD |    |
|--------------------------|--------------------------|----------------|----|
| GRID 1 TO PLATE, MAXIMUM | 0.0035                   | 0.0035         | pf |
| INPUT                    | 5.4                      | 5.4            | pf |
| OUTPUT                   | 4.4                      | 4.4            | pf |

### HEATER CHARACTERISTICS AND RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

|                                         |     |       |         |       |
|-----------------------------------------|-----|-------|---------|-------|
| AVERAGE CHARACTERISTICS                 | 6.3 | VOLTS | 150     | MA.   |
| HEATER SUPPLY LIMITS:                   |     |       |         |       |
| VOLTAGE OPERATION                       |     |       | 6.3±1.3 | VOLTS |
| MAXIMUM HEATER-CATHODE VOLTAGE:         |     |       |         |       |
| HEATER POSITIVE WITH RESPECT TO CATHODE |     |       | 100     | VOLTS |
| HEATER NEGATIVE WITH RESPECT TO CATHODE |     |       | 100     | VOLTS |

<sup>A</sup> WITH EXTERNAL SHIELD 316 CONNECTED TO PINS 2 AND 7.

CONTINUED ON FOLLOWING PAGE

**TUNG-SOL**

CONTINUED FROM PRECEDING PAGE

**MAXIMUM RATINGS**

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

|                            |                  |       |
|----------------------------|------------------|-------|
| PLATE VOLTAGE              | 330              | VOLTS |
| GRID 2 SUPPLY VOLTAGE      | 330              | VOLTS |
| GRID 2 VOLTAGE             | See Rating Chart |       |
| POSITIVE DC GRID 1 VOLTAGE | 0                | VOLTS |
| NEGATIVE DC GRID 1 VOLTAGE | 55               | VOLTS |
| PLATE DISSIPATION          | 3.3              | WATTS |
| GRID 2 DISSIPATION         | 0.55             | WATTS |

**TYPICAL OPERATING CHARACTERISTICS**

CLASS A1 AMPLIFIER

|                                                   |       |            |
|---------------------------------------------------|-------|------------|
| PLATE VOLTAGE                                     | 250   | VOLTS      |
| GRID 3 VOLTAGE                                    | 0     | VOLTS      |
| GRID 2 VOLTAGE                                    | 150   | VOLTS      |
| CATHODE-BIAS RESISTOR                             | 100   | OHMS       |
| PLATE CURRENT                                     | 7.4   | MA.        |
| GRID 2 CURRENT                                    | 2.6   | MA.        |
| TRANSCONDUCTANCE                                  | 4,600 | $\mu$ MHOS |
| PLATE RESISTANCE, APPROX.                         | 1.4   | MEG OHMS   |
| GRID 1 VOLTAGE (APPROX.) FOR $I_b = 10 \mu$ AMPS. | -7.7  | VOLTS      |

**SPECIAL TESTS AND RATINGS**

HEATER-CYCLING RATING

