

## TUNG-SOL

## PENTODE

MINIATURE TYPE

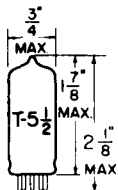
COATED UNIPOTENTIAL CATHODE

HEATER

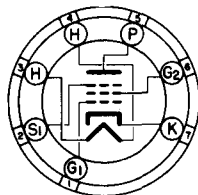
12.6 VOLTS .175 AMP.

AC OR DC

ANY MOUNTING POSITION



GLASS BULB



BOTTOM VIEW

MINIATURE BUTTON  
7 PIN BASE

THE 12EZ6 IS A SHARP CUTOFF PENTODE WITH A UNIPOTENTIAL CATHODE IN THE 7 PIN MINIATURE CONSTRUCTION. IT IS INTENDED FOR USE AS AN RF OR IF AMPLIFIER WHERE THE HEATER, PLATE AND SCREEN GRID POTENTIALS ARE OBTAINED DIRECTLY FROM AN AUTOMOTIVE BATTERY.

## DIRECT INTERELECTRODE CAPACITANCES

|                      |      |            |
|----------------------|------|------------|
| GRID TO PLATE (MAX.) | .008 | $\mu\mu f$ |
| INPUT:               | 7.8  | $\mu\mu f$ |
| OUTPUT:              | 5.5  | $\mu\mu f$ |

## RATINGS

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

|                                    |          |         |
|------------------------------------|----------|---------|
| HEATER VOLTAGE                     | 12.6     | VOLTS   |
| MAXIMUM HEATER-CATHODE VOLTAGE     | $\pm 30$ | VOLTS   |
| MAXIMUM PLATE VOLTAGE              | 30       | VOLTS   |
| MAXIMUM GRID #2 VOLTAGE            | 30       | VOLTS   |
| MAXIMUM CATHODE CURRENT            | 10       | MA.     |
| MAXIMUM GRID #1 CIRCUIT RESISTANCE | 10       | MEGOHMS |

## TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS  $A_1$  AMPLIFIER

|                                                         |      |                   |                    |
|---------------------------------------------------------|------|-------------------|--------------------|
| HEATER VOLTAGE                                          | 12.6 | 14.0              | VOLTS              |
| HEATER CURRENT                                          | .175 | .175              | AMP.               |
| PLATE VOLTAGE                                           | 12.6 | 14.0              | VOLTS              |
| GRID #3 VOLTAGE <sup>B</sup>                            | 0    | 0                 | VOLTS              |
| GRID #2 VOLTAGE                                         | 12.6 | 14.0              | VOLTS              |
| GRID #1 VOLTAGE                                         | -0.7 | -0.8 <sup>D</sup> | VOLTS              |
| PLATE CURRENT                                           | 1.9  | 2.3               | MA.                |
| GRID #2 CURRENT                                         | 0.7  | 0.85              | MA.                |
| PLATE RESISTANCE                                        | 0.40 | 0.30              | MEGOHMS            |
| TRANSCONDUCTANCE <sup>C</sup>                           | 2700 | 3000              | $\mu\mu\text{HOS}$ |
| GRID #1 VOLTAGE FOR $I_b = 50 \mu\text{MHOS}$           | -2.6 | -2.8              | VOLTS              |
| GRID #1 & GRID #3 VOLTAGE FOR $G_m = 30 \mu\text{MHOS}$ | -2.8 | -3.0              | VOLTS              |

<sup>A</sup> THIS TUBE IS INTENDED TO BE USED IN AUTOMOTIVE SERVICE FROM A NOMINAL 12 VOLT BATTERY SOURCE. THE HEATER IS THEREFORE DESIGNED TO OPERATE OVER THE 10.0 TO 15.9 VOLTAGE RANGE ENCOUNTERED IN THIS SERVICE. THE MAXIMUM RATINGS OF THE TUBE PROVIDE FOR AN ADEQUATE SAFETY FACTOR SUCH THAT THE TUBE WILL WITHSTAND THE WIDE VARIATION IN SUPPLY VOLTAGES.

<sup>B</sup> CONNECTED TO CATHODE AT SOCKET. <sup>C</sup> FROM GRID #1 TO PLATE.

<sup>D</sup> AVERAGE BIAS DEVELOPED ACROSS A 2.2 MEGOHM GRID RESISTOR.

