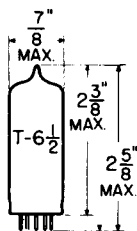


## TUNG-SOL

## PENTODE

## MINIATURE TYPE



GLASS BULB

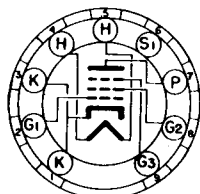
COATED UNIPOTENTIAL CATHODE

HEATER

3.4 VOLTS 0.60 AMP.

AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW

9A9

THE 3BX6 IS A PENTODE IN THE 9 PIN MINIATURE CONSTRUCTION. IT IS DESIGNED FOR USE AS AN R.F., I.F. OR A VIDEO AMPLIFIER OR MIXER IN TELEVISION RECEIVERS. EXCEPT FOR HEATER RATINGS, THE 3BX6 IS IDENTICAL TO THE 12BX6.

## DIRECT INTERELECTRODE CAPACITANCES

|                                            |       |                |
|--------------------------------------------|-------|----------------|
| GRID #1 TO ALL OTHER ELEMENTS EXCEPT ANODE | 7.5   | $\mu\text{mf}$ |
| PLATE TO ALL OTHER ELEMENTS EXCEPT GRID #1 | 3.3   | $\mu\text{mf}$ |
| PLATE TO GRID #1 (MAX.)                    | 0.007 | $\mu\text{mf}$ |
| PLATE TO CATHODE (MAX.)                    | 0.012 | $\mu\text{mf}$ |
| GRID #2 TO ALL OTHER ELEMENTS              | 5.4   | $\mu\text{mf}$ |
| GRID #2 TO GRID #1                         | 2.6   | $\mu\text{mf}$ |
| GRID #1 TO HEATER (MAX.)                   | 0.15  | $\mu\text{mf}$ |
| CATHODE TO HEATER                          | 5     | $\mu\text{mf}$ |

## RATINGS

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

|                                                              |        |         |
|--------------------------------------------------------------|--------|---------|
| HEATER VOLTAGE                                               | 3.4    | VOLTS   |
| MAXIMUM PLATE VOLTAGE WITHOUT CURRENT                        | 550    | VOLTS   |
| MAXIMUM PLATE VOLTAGE                                        | 250    | VOLTS   |
| MAXIMUM PLATE DISSIPATION                                    | 2.5    | WATTS   |
| MAXIMUM GRID #2 VOLTAGE WITH COLD CATHODE                    | 550    | VOLTS   |
| MAXIMUM GRID #2 VOLTAGE                                      | 250    | VOLTS   |
| MAXIMUM GRID #2 DISSIPATION                                  | 0.7    | WATTS   |
| MAXIMUM GRID #2 DISSIPATION AT PLATE DISSIPATION < 1.8 WATTS | 0.9    | WATTS   |
| MAXIMUM CATHODE CURRENT                                      | 15     | MAMPS   |
| MAXIMUM GRID #1 CIRCUIT RESISTANCE                           | 1      | MEG OHM |
| MAXIMUM VOLTAGE BETWEEN CATHODE AND HEATER                   | 150    | VOLTS   |
| MAXIMUM CIRCUIT RESISTANCE BETWEEN CATHODE AND HEATER        | 20 000 | OHMS    |

CONTINUED ON FOLLOWING PAGE

## TUNG-SOL

CONTINUED FROM PRECEDING PAGE

## TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

## R.F. AMPLIFIER

|                                  |        |        |        |        |
|----------------------------------|--------|--------|--------|--------|
| HEATER VOLTAGE                   | 3.4    | 3.4    | 3.4    | VOLTS  |
| HEATER CURRENT                   | 0.60   | 0.60   | 0.60   | AMP.   |
| PLATE VOLTAGE                    | 170    | 200    | 250    | VOLTS  |
| GRID #3 VOLTAGE                  | 0      | 0      | 0      | VOLT   |
| GRID #2 VOLTAGE                  | 170    | 200    | 250    | VOLTS  |
| GRID #1 VOLTAGE                  | -2.0   | -2.55  | -3.5   | VOLTS  |
| PLATE CURRENT                    | 10     | 10     | 10     | MAMPS  |
| GRID #2 CURRENT                  | 2.5    | 2.6    | 2.8    | MAMPS  |
| TRANSCONDUCTANCE                 | 7400   | 7100   | 6800   | μMHOS  |
| PLATE RESISTANCE                 | 0.5    | 0.55   | 0.65   | MEGOHM |
| AMPLIFICATION FACTOR OF          |        |        |        |        |
| GRID #2 WITH RESPECT TO GRID #1  | 50     | 50     | 50     |        |
| EQUIVALENT NOISE RESISTANCE      | 1000   | 1100   | 1200   | OHMS   |
| INPUT RESISTANCE AT FREQUENCY =  |        |        |        |        |
| 50 Mc (PIN 1 CONNECTED TO PIN 3) | 10 000 | 12 000 | 15 000 | OHMS   |

## OBSERVATION

WHEN USING THE 3BX6 AS VIDEO AMPLIFIER THE AMPLIFICATION BETWEEN THE INPUT GRID OF THE 3BX6 AND THE INPUT OF THE CATHODE RAY TUBE SHOULD NOT EXCEED A VALUE OF 25, IN ORDER TO PREVENT MICROPHONIC EFFECT.