

## TUNG-SOL

## CATHODE RAY

## COATED UNIPOTENTIAL CATHODE

## HEATER

6.3 VOLTS 0.6 AMP.

AC OR DC

ANY MOUNTING POSITION

METAL-CONE ENVELOPE

SMALL SHELL DUODECAL 5 PIN BASE

THE 12UP4A IS A METAL-CONE DIRECTLY VIEWED PICTURE TUBE DESIGNED FOR USE IN TELEVISION RECEIVERS. THE TUBE UTILIZES MAGNETIC FOCUS AND DEFLECTION TO PROVIDE 7 3/4" X 10 1/2" PICTURES. IT HAS A GREY NEUTRAL-DENSITY FACEPLATE FOR INCREASED PICTURE CONTRAST AND HIGH AMBIENT LIGHT CONDITIONS AND AN ELECTRON GUN TO BE USED WITH AN EXTERNAL ION-TRAP MAGNET FOR THE PREVENTION OF ION-SPOT BLEMISH.

## DESCRIPTION

|                                  |                |
|----------------------------------|----------------|
| FLUORESCENCE AND PHOSPHORESCENCE | WHITE          |
| PERSISTENCE                      | MEDIUM         |
| DEFLECTING AND FOCUSING METHOD   | MAGNETIC       |
| DEFLECTION ANGLE (APPROX.)       | 54 DEGREES     |
| ION TRAP                         | MAGNETIC       |
| ANODE TERMINAL                   | METAL-CONE LIP |

## DIRECT INTERELECTRODE CAPACITANCES - APPROX.

|                                 |   |     |
|---------------------------------|---|-----|
| GRID #1 TO ALL OTHER ELECTRODES | 6 | μmf |
| CATHODE TO ALL OTHER ELECTRODES | 5 | μmf |

## RATINGS

INTERPRETED ACCORDING TO RMA STANDARDS M8-210

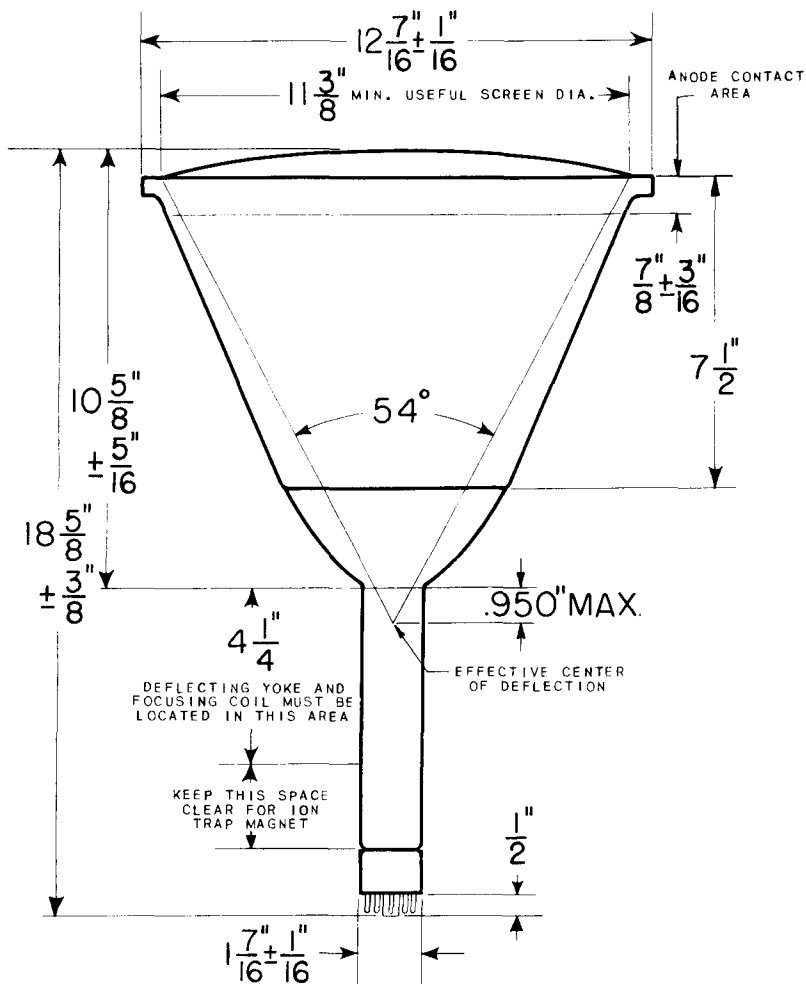
|                                          |        |         |
|------------------------------------------|--------|---------|
| HEATER VOLTAGE                           | 6.3    | VOLTS   |
| HEATER CURRENT                           | 0.6    | AMP.    |
| MAXIMUM ANODE VOLTAGE                    | 12 000 | VOLTS   |
| MAXIMUM GRID #2 VOLTAGE                  | 410    | VOLTS   |
| MAXIMUM GRID #1 VOLTAGE:                 |        |         |
| NEGATIVE BIAS VOLTAGE                    | 125    | VOLTS   |
| POSITIVE BIAS VOLTAGE                    | 0      | VOLTS   |
| POSITIVE PEAK VOLTAGE                    | 2      | VOLTS   |
| MAXIMUM PEAK HEATER-CATHODE VOLTAGE:     |        |         |
| HEATER NEGATIVE WITH RESPECT TO CATHODE: |        |         |
| DURING EQUIPMENT WARM-UP PERIOD          |        |         |
| NOT EXCEEDING 15 SECONDS                 | 410    | VOLTS   |
| AFTER EQUIPMENT WARM-UP PERIOD           | 140    | VOLTS   |
| HEATER POSITIVE WITH RESPECT TO CATHODE  | 140    | VOLTS   |
| MAXIMUM GRID #1 CIRCUIT RESISTANCE       | 1.5    | MEGOHMS |

## TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

|                                                                 |            |       |
|-----------------------------------------------------------------|------------|-------|
| ANODE VOLTAGE                                                   | 11 000     | VOLTS |
| GRID #2 VOLTAGE                                                 | 250        | VOLTS |
| GRID #1 VOLTAGE (VISUAL EXTINCTION OF UNDEFLECTED FOCUSED SPOT) | -27 TO -63 | VOLTS |
| FOCUSING COIL CURRENT (APPROX.)                                 | 110        | MA.   |

SIMILAR TYPE REPRESENTS: The 12UP4A is identical to the 12UP4 except for the grey filter faceplate.

## TUNG-SOL



1. HEATER
  2. GRID NO. 1
  10. GRID NO. 2
  11. CATHODE
  12. HEATER
- METAL-CONE LIP: ANODE, GRID NO. 3

