TUNG-SOL

CATHODE RAY

COATED UNIPOTENTIAL CATHODE

HEATER
6.3 VOLTS 0.6 AMPERE
AC OR DC
ANVY MOUNTING POSITION

THE 12LP4A IS A MAGNETIC FOCUS AND MAGNETIC DEFLECTION DIRECT VIEW PICTURE TUBE FOR TELEVISION RECEIVERS. IT HAS A GREY NEUTRAL-DENSITY FACEPLATE FOR INCREASED PICTURE CONTRAST AND DETAIL UNDER HIGH AMBIENT LIGHT CONDITIONS.

DESCRIPTION

FLUORESCENCE      WHITE
PERSISTENCE       MEDIUM
DEFLECTION AND FOCUSING METHOD MAGNETIC
DEFLECTION ANGLE (APPROX.) 54 DEGREES
EXTERNAL COATING WHEN GROUNDED ACTS AS A FILTER CAPACITOR
ELECTRON GUN TO BE USED WITH ION-TRAP MAGNET
BULB CONTACT RECESSED SMALL CAVITY CAP

DIRECT INTERELECTRODE CAPACITANCES - APPROX.

CATHODE TO ALL OTHER ELECTRODES: K TO (H+G4+G2+A) 5 μF
GRID #1 TO ALL OTHER ELECTRODES: G2 TO (H+G4+G2+A) 6 μF
MAXIMUM EXTERNAL CONDUCTIVE COATING TO ANODE 3000 μF
MINIMUM EXTERNAL CONDUCTIVE COATING TO ANODE 750 μF

RATINGS

INTERPRETED ACCORDING TO EIA STANDARD MS-210

DESIGN CENTER VALUES

HEATER VOLTAGE 6.3 VOLTS
MAXIMUM ANODE VOLTAGE 12000 VOLTS
MAXIMUM GRID #2 VOLTAGE 410 VOLTS
MAXIMUM GRID #4 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 125 VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE 125 VOLTS

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

HEATER VOLTAGE 6.3 VOLTS
HEATER CURRENT .6 AMP.
ANODE VOLTAGEA 11000 VOLTS
GRID #2 VOLTAGE 250 VOLTS
GRID #4 VOLTAGEB -27 TO -63 VOLTS
FOCUSING COIL CURRENT (APPROX.)C 110 MA.
ION-TRAP CURRENT (APPROX.)D 120 MA.
GRID #4 CIRCUIT RESISTANCE 1.5 MEGOHMS

A ANODE CONTACT ALIGNS WITH VACANT PIN POSITION #3 210 DEGREES.
B VISIBLE EXTINCTION OF UNDEFOCUSED SPOT.
C FOR JETEC STANDARD: FOCUS COIL WITH THE COMBINED GRID #2 BIAS VOLTAGE AND VIDEO SIGNAL VOLTAGE ADJUSTED TO PRODUCE A HIGHLIGHT BRIGHTNESS OF 20 FOOT LAMBERTS ON A 12 1/2 INCH PICTURE AREA. DISTANCE FROM REFERENCE LINE OF BULB TO CENTER OF FOCUS COIL AIR GAP SHALL BE 3.25 IN.
D WITH JETEC STANDARD ION-TRAP MAGNET.
TUNG-SOL

12 7\" 1/16 - 1/16

11\" MIN. USEFUL SCREEN DIA.

10 1/2
\[ + \frac{3}{16} \]

18 3/4
\[ + \frac{3}{8} \]

EXTERNAL CONDUCTIVE COATING

4 \frac{1}{4}
DEFLECTING YOKE AND FOCUSING COIL MUST BE LOCATED IN THIS AREA

KEEP THIS SPACE CLEAR FOR ION TRAP MAGNET

7 \frac{1}{2}
\[ + \frac{3}{8} \]

17 \frac{1}{16}
\[ \frac{3}{4} - \frac{16}{16} \]

ANODE TERMINAL

1. HEATER
2. GRID NO. 1
6. NO CONNECTION
7. NO CONNECTION
10. GRID NO. 2
11. CATHODE
12. HEATER
CAP. ANODE NO. 1

SMALL SHELL DUODECAL
7 PIN BASE
120

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