BRIEF DESCRIPTION

The 10AJP- is a 10-inch rectangular all glass, magnetic deflection cathode ray tube, featuring an automatic electrostatic focus straight gun. (No separate focus supply required).

An aluminized screen is utilized for greater light output and to minimize screen charging effects.

GENERAL CHARACTERISTICS

ELECTRICAL DATA

- **Heater current at 6.3 volts**: 0.6 ± 10% amp.
- **Focusing Method**: Electrostatic
- **Deflection Method**: Magnetic
- **Deflection Angle (Diagonal)**: 90 Degrees
- **Direct Interelectrode Capacitances (approx.)**:
  - Cathode to All Other Electrodes: 5 uuf
  - Grid No. 1 to All Other Electrodes: 6 uuf

OPTICAL DATA

- **Phosphor Number (Note 1)**: 4, 7, 31
- **Fluorescence**: White, White, Yel-Green
- **Phosphorescence**: White, Yellow, Yel-Green
- **Persistence**: Medium, Long, Med-Short
- **Faceplate (Aluminized)**: Gray Filter Glass
- **Light Transmission (approx.)**: 80 Percent

MECHANICAL DATA

- **Overall Length**: 10-7/8 ± 5/16 Inches
- **Greatest Bulb Dimensions**:
  - Diagonal: 10-3/8 ± 1/8 Inches
  - Width: 9-3/4 ± 1/8 Inches
  - Height: 7-1/2 ± 1/8 Inches
- **Minimum Useful Screen Dimensions**: 9-1/16 X 6-5/8 Inches
- **Bulb Number**: J83-A1
- **Bulb Contact (Recessed Small Cavity)**: J1-21
- **Base (Small Shell Duodecal 5-Pln)**: B5-57
- **Bulb Contact Alignment**:
  - J1-21 Contact Aligns with Vacant Pin No. 6
  - J1-21 Contact on Same Side as Pin No. 6: ± 30 Degrees
- **Basing**: 12-S
- **Weight (approx.)**: 4 Pounds
- **Neck Length**: 5-1/2 ± 3/16 Inches
RATINGS (Design Maximum Values)

Anode Voltage 20,000 Volts DC
Grid No. 2 Voltage 550 Volts DC
Grid No. 1 Voltage
  Negative Bias Value 155 Volts DC
  Positive Bias Value 0 Volts DC
  Positive Peak Value 2 Volts
Peak Heater-Cathode Voltage
  Heater Negative to Cathode
    During the 15 Second Warm-up 450 Volts
    After Warm-up 200 Volts
  Heater Positive to Cathode 200 Volts

TYPICAL OPERATING CONDITIONS

Anode Voltage 16,000 Volts DC
Grid No. 2 Voltage 300 Volts DC
Grid No. 1 Voltage (Note 2) -35 to -72 Volts DC
  Internally Connected to Grid No. 2
Focusing Electrode (Note 3) Within a 1/4" Radius Circle
Spot Position (Note 4) Typical .010 Inch
Line Width (Note 5)

MAXIMUM CIRCUIT VALUES

Grid No. 1 Circuit Resistance 1.5 Megohms Max.

NOTES

1. Other phosphor screen types are available upon request.

2. Visual extinction of focused raster.

3. Under typical operating conditions, good focus is obtained over the entire screen at normal drive levels. Some loss in focus quality may result if operating conditions depart substantially from those specified above.

4. With the tube shielded against external influences, the undeflected and focused spot will fall within a 1/4" radius circle concentric with the tube face center.

5. As measured with an anode current of 100 uA dc. In terms of resolution, this tube is capable of resolving a minimum of 600 lines.
NOTE:

1. DETERMINED BY THE POINT WHERE JEDEC G-126
REFERENCE GAUGE WILL STOP.

THOMAS ELECTRONICS, INC., PASSAIC, NEW JERSEY