

# 7AZP24 CATHODE RAY TUBE

The Continental 7AZP24 is a seven-inch, magnetically focused and deflected, cathode ray tube intended primarily for use in television flying-spot scanners where strong light output, high resolution, and an optically perfect faceplate are required. The faceplate of the 7AZP24 is carefully manufactured of non-browning glass to conform to a uniform standard of curvature and thickness. An accelerating potential of 30,000 volts produces a small spot size for very high resolution. Other screen phosphors may be obtained upon request.

## GENERAL CHARACTERISTICS

### Electrical Data

Heater Voltage .....	6.3 Volts
Heater Current .....	0.6±10% Amperes
Focusing Method .....	Magnetic
Deflecting Method .....	Magnetic
No-Ion-Trap Gun .....	No Magnet Required
Deflection Angle, approximate .....	57 Degrees
Direct Interelectrode Capacitances, approximate	
Cathode to All Other Electrodes .....	5 uuf
Grid No. 1 to All Other Electrodes .....	7 uuf
External Conductive Coating to Anode	
Maximum .....	700 uuf
Minimum .....	300 uuf

### Optical Data

Screen .....	P24 Aluminized
Fluorescence .....	Light Green
Persistence .....	Extremely Short

### Mechanical Data

Over-all Length .....	18-3/8±1/2 Inches
Minimum Useful Screen Diameter (Maximum Assured) .....	6.0 Inches
Greatest Diameter of Bulb .....	7-1/2±1/8 Inches
Neck Length .....	11-3/8 Inches
Bulb Contact .....	JEDEC No. J1-22
Base .....	Small Shell Duodecal 7-pin, JEDEC No. B7-51
Basing .....	JEDEC Designation 12D

### Maximum Ratings (Absolute Maximum Ratings)

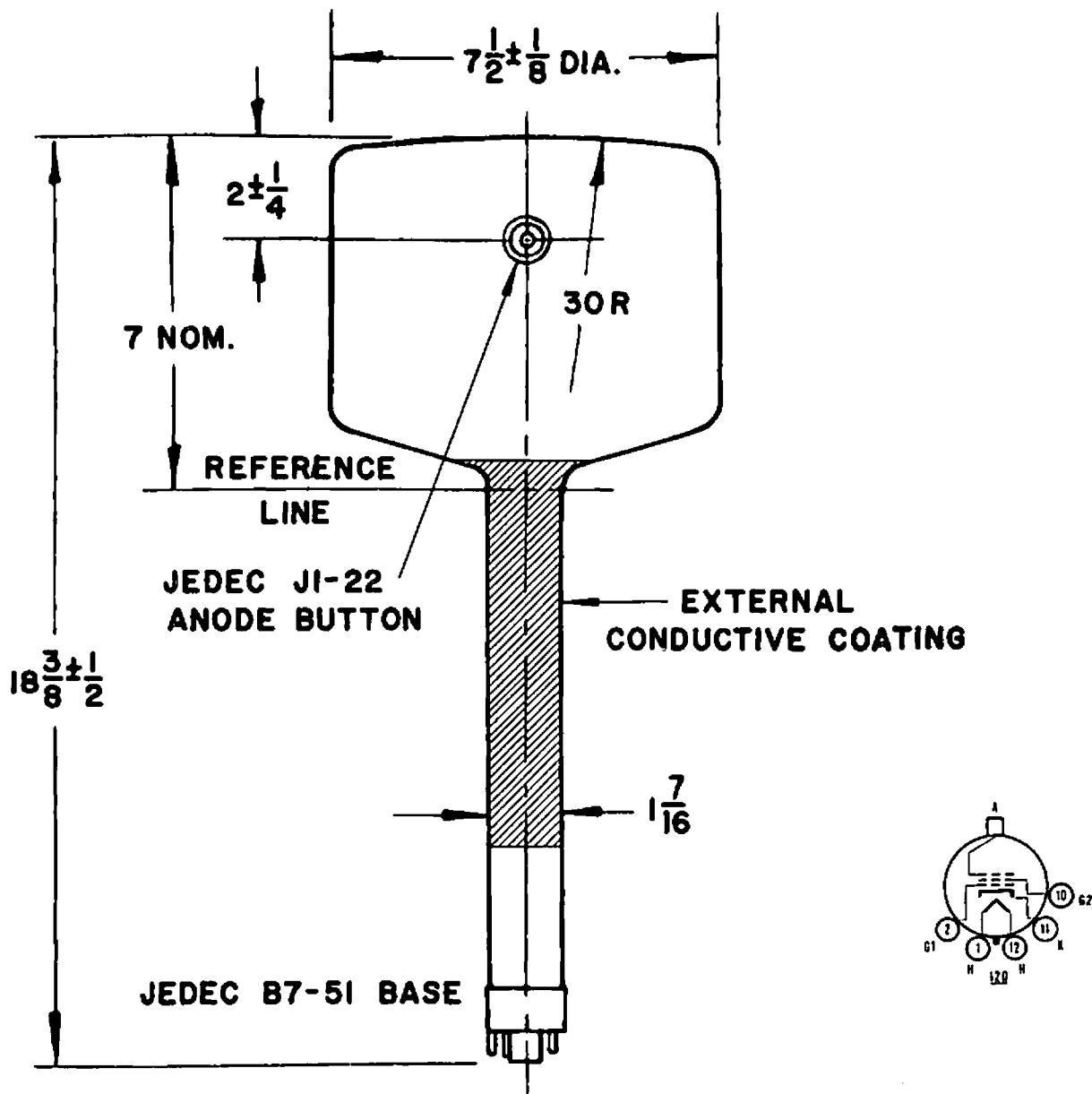
Anode Voltage .....	30,000 Max. Volts
Grid No. 2 Voltage .....	410 Max. Volts
Grid No. 1 Voltage, Bias Value Range (DC) .....	-200 to 0 Volts
Peak Heater-Cathode Voltage:	
Heater negative with respect to cathode ....	125 Max. Volts
Heater positive with respect to cathode ....	125 Max. Volts

### Typical Operating Conditions

Anode Voltage .....	27,000 to 30,000 Volts
Grid No. 2 Voltage .....	300 Volts
Grid No. 1 Voltage for Visual Extinction of Undelected, Focused Spot .....	-30 to -90 Volts



OUTLINE DRAWING



Note 1. Grid No. 3 is internally connected to the anode and is referred to herein as anode. When operating the tube at recommended anode voltages X-ray radiation shielding may be necessary to protect against possible danger of personal injury from prolonged exposure at close range.

Note 2. Continuous operation at high heater to cathode voltage is not recommended.

Note 3. The anode contact aligns with vacant pin position no. 3 ± 10°.

Note 4. External conductive coating must be grounded.