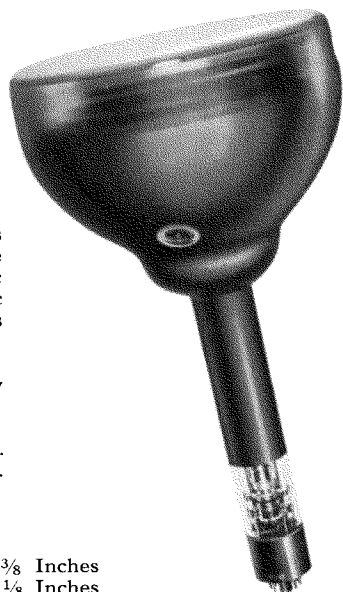


# 7UP7 CATHODE-RAY TUBE

The Type 7UP7 is a 7-inch magnetic focus and deflection cathode-ray tube with a relatively large and flat screen area. It is designed for applications requiring a long persistent type screen. The screen is metal-backed.



## GENERAL CHARACTERISTICS

### Electrical Data

Heater Voltage .....	6.3	Volts
Heater Current .....	0.6 ± 10%	Ampere
Focusing Method .....	Magnetic	
Deflecting Method .....	Magnetic	
Deflecting Angle (Approx.) .....	53	Degrees
Phosphor .....	No. 7	
Fluorescence .....	Blue	
Phosphorescence .....	Yellow	
Persistence .....	Long	
Direct Interelectrode Capacitances, Approx.		
Cathode to all other electrodes .....	5	μf.
Grid No. 1 to all other electrodes .....	8.5	μf.

### Mechanical Data

Overall Length .....	13¼ ± ⅜	Inches
Greatest Diameter of Bulb .....	7 ± ⅛	Inches
Minimum Useful Screen Diameter .....	6	Inches
Bulb Contact (Recessed Small Cavity Cap) .....	J1-21	
Base (Long Medium-Shell Octal 8-Pin or) .....	B8-65 or	
(Long Medium-Shell Octal 5-Pin) .....	B5-80	
Basing .....	5AN	
Bulb Contact Alignment		
J1-21 Contact aligns with Pin No. 5 .....	± 10	Degrees

### MAXIMUM RATINGS (Design Center Values)

Accelerator Voltage .....	10,000	Max. Volts D-C
Grid No. 2 Voltage .....	700	Max. Volts D-C
Grid No. 1 Voltage		
Negative Bias Value .....	180	Max. Volts D-C
Positive Bias Value <sup>1</sup> .....	0	Max. Volts D-C
Positive Peak Value .....	2	Max. Volts
Peak Heater-Cathode Voltage		
Heater Negative with respect to cathode		
During warm-up period not to exceed 15 seconds .....	410	Max. Volts D-C
After equipment warm-up period .....	180	Max. Volts D-C
Heater Positive with respect to cathode .....	180	Max. Volts D-C

### TYPICAL OPERATING CONDITIONS

Accelerator Voltage .....	7,000	Volts D-C
Grid No. 2 Voltage .....	250	Volts D-C
Grid No. 1 Voltage <sup>2</sup> .....	-25 to -70	Volts D-C
Focusing Coil Current <sup>3</sup> .....	99 to 135	Ma. D-C

### MAXIMUM CIRCUIT VALUES

Grid No. 1 Circuit Resistance .....	1.5	Max. Megohms
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### NOTES

1. At or near this rating, the effective resistance of the accelerator supply should be adequate to limit the accelerator input power to 6 watts.
2. Visual extinction of undeflected focused spot.
3. For JETEC standard focus coil No. 106, or equivalent, with the grid voltage adjusted to produce an accelerator current of 200 microamperes and with distance (D) from reference line to center of air gap equal to 2.75 inches.

# TYPE 7UP-

