 Type	Description <sup>Δ</sup>
<b>PROJECTION KINESCOPIES</b> ⊕	
<b>5AZP4</b>	5" electrostatic-focus, magnetic-deflection type. Provides an 8' by 6' picture. Integral flexible ultor lead. Small-shell duodecal 7-pin base.††
<b>7NP4</b>	Similar to 7WP4 except provides a 20' by 15' picture at a projection-throw distance of about 60'. <sup>Ⓞ</sup>
<b>7WP4</b>	7" electrostatic-focus, magnetic-deflection type. Intended for theater-television use. Provides a 20' by 15' picture at a projection-throw distance of about 80'. Medium cap. Small-shell diheptal 14-pin base. <sup>Ⓞ</sup>
<b>MONOSCOPES</b>	
<b>2F21</b>	5" electrostatic-focus, magnetic-deflection type with Indian Head Pattern. For supplying signal to test video performance of television transmitters and receivers. Two recessed small ball caps. Long medium-shell small 6-pin base.
<b>1699</b>	Custom-built type like the 2F21 except that its pattern is individually styled to customer requirements.

<sup>Δ</sup> Unless otherwise specified, all of these types have electrostatic focus and deflection and a heater rating of 6.3 volts and 0.6 amp.

⊕ For information on picture tubes used in television broadcast receivers, see RCA booklet 1275-H (RCA Receiving Tubes and Picture Tubes).

†† Heater rating: 6.3 volts, 0.6 amp.

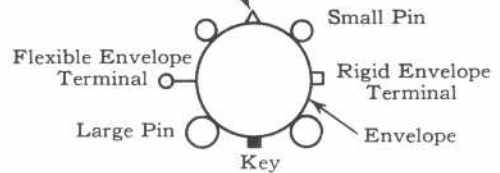
Ⓞ Heater rating: 6.6 volts, 0.62 amp.

**KEY TO BASE AND ENVELOPE CONNECTION DIAGRAMS**

Diagrams show terminals viewed from the base end of the type

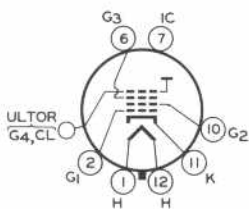
- BE = Backing Electrode
- C = External Conductive Coating
- C<sub>b</sub> = Balancing Capacitance
- CL = Collector
- DJ = Deflecting Electrode
- DY = Dynode
- G = Grid
- H = Heater
- IC = Internal Connection —Do Not Use
- K = Cathode
- NC = No Connection

Orientation Symbol  
Other Than Key

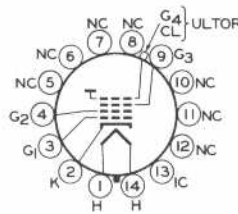


- P = Anode
- PC = Photocathode
- PJ = Pattern Electrode
- SHJ = Shading Electrode
- SJ = Signal Electrode
- SS = Storage Surface
- U = Unit
- = Gas-Type Tube

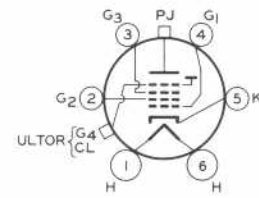
Lambda (λ) indicates that the primary characteristic of the element is designed to vary under the influence of light.



5AZP4



7NP4 7WP4



2F21 1699

Maximum Dimensions		Min. Useful Screen Diam. inches	Maximum Ratings♦♦					Operating Conditions					RCA Type	
Overall Length inches	Envelope Diam. inches		Final High-Voltage Electrode		Grid-No. 3 Volts	Grid-No. 2 Volts	Grid-No. 1 Bias Volts†	Final High-Voltage Electrode Volts	Grid-No. 3 Voltage for Focus Approx.	Grid-No. 2 Volts	Maximum Grid-No. 1 Volts for Visual Cutoff‡	Deflection Factor volts dc/in.		
			Post-Ultor Volts	Ultor Volts								DJ1 & DJ2		DJ3 & DJ4
<b>PROJECTION KINESCOPIES ⊕</b>														
12 <sup>1</sup> / <sub>16</sub>	5 <sup>1</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>2</sub>	—	40000	9000	400	-150	36000	6650 to 8100	140 to 350	-93	Deflection Angle, 50° approx.	<b>5AZP4</b>	
20 <sup>1</sup> / <sub>8</sub>	7 <sup>3</sup> / <sub>16</sub> ▲	5 x 3 <sup>3</sup> / <sub>4</sub> ∅	—	80000‡	20000‡	600‡	-250‡	75000	15000 to 17000	400 to 600‡	-155‡	Deflection Angle, 35° approx.	<b>7NP4</b>	
20 <sup>1</sup> / <sub>16</sub>	7 <sup>3</sup> / <sub>16</sub> ▲	5 x 3 <sup>3</sup> / <sub>4</sub> ∅	—	80000‡	20000‡	600‡	-250‡	75000	15000 to 17000	400 to 600‡	-155‡	Deflection Angle, 35° approx.	<b>7WP4</b>	
<b>MONOSCOPIES</b>														
12 <sup>11</sup> / <sub>16</sub>	5 <sup>1</sup> / <sub>16</sub>	2 <sup>5</sup> / <sub>16</sub> x 3 <sup>1</sup> / <sub>16</sub> *	—	1500	Resolution Capability (with full scanning), 500 TV lines. Pattern-Electrode Signal Current (peak-to-peak), 0.3 to 0.7 μamp.								<b>2F21</b>	
For additional data, refer to type 2F21.													<b>1699</b>	

♦♦ Design-center values.

▲ The "ultor" is the electrode to which is applied the highest dc voltage for accelerating the electrons in the beam prior to its deflection.

† Positive bias value = 0 volts, positive peak value = 2 volts.

♦ Ultor volts.

‡ For visual cutoff of undeflected focused spot except as noted.

▲ Excluding side cap.

∅ Quality rectangle. Max. faceplate temperature = 100° C. Tube requires 40 cfm air flow to faceplate.

\* Pattern size, approximate.

‡ Absolute value.

‡ Vary to cut off raster.

‡ Recommended operating value.

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