

N U P 122P1 N U P 122P11

HIGHER SENSITIVITY MINIATURE CATHODE RAY TUBE

Tentative

The N U P 122 is an electrostatically focused and deflected improved sensitivity miniature Cathode Ray tube in a T6½ bulb with 9-pin miniature base. This tube yields good light output, can withstand the standard shock and vibration tests, and has no exposed exhaust tip. Its low heater power consumption (less than 1.4 watts) and low operating voltages provide a tube which can be incorporated in a wide variety of electronic equipment for built-in visual monitoring.

MAXIMUM RATINGS

Heater voltage (ac or dc)	6.3 v.
Cathode current	1000 μ a
Grid voltage	-100 v.
Deflection potential*	200 v.
Anode 1	300 v.
Anode 2	1000 v.
Grid resistor	2 meg.
Deflection resistor	2 meg.

*Measured between the two deflection plates of D1-D2 or D3-D4.

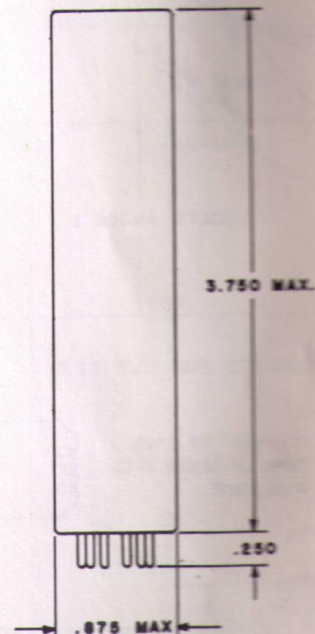
INTERELECTRODE CAPACITIES

G1 to all other elements	4.0 μ mf
K to all other elements	2.0 μ mf
D1 to D2	1.0 μ mf
D3 to D4	1.0 μ mf
D1 to all other elements	3.0 μ mf
D3 to all other elements	3.0 μ mf
D1 to all elements except D2	2.0 μ mf
D2 to all elements except D1	2.0 μ mf
D3 to all elements except D4	2.0 μ mf
D4 to all elements except D3	2.0 μ mf

TYPICAL OPERATING CONDITIONS

Heater voltage (ac or dc)	6.3 v.
Heater current	200 ma
Cathode current	0-250 μ a
Line width	0.25 mm
Grid cutoff voltage	-65 v.
A2 voltage	800 v.
A1 voltage	230 v.
Deflection factor **D1-D2	200 v/in.
Deflection factor **D3-D4	180 v/in.

**This tube requires an ac signal of about 45v RMS to sweep the useful screen diameter.



BASE PIN CONNECTIONS

Pin 1:	G1	Pin 6:	D2
Pin 2:	D1	Pin 7:	A2
Pin 3:	D3	Pin 8:	A1
Pin 4:	H	Pin 9:	D4
Pin 5:	HK		

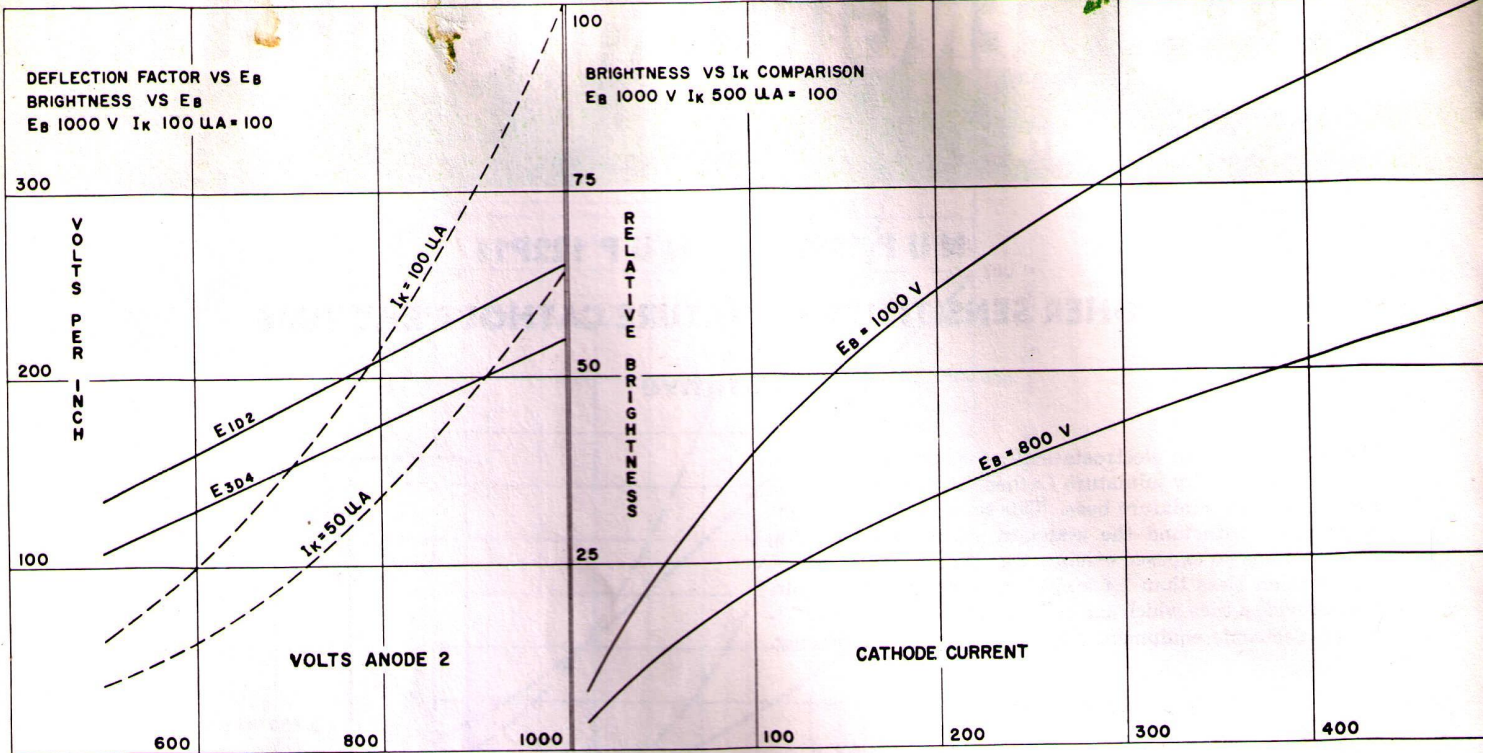
PHYSICAL SPECIFICATIONS

Style	Miniature
Bulb	T6½
Basing	9 CU
Mounting Position	Any
Base Alignment	1D2 between Pins 2 and 3
Socket	9-pin Noval

PHOSPHORS

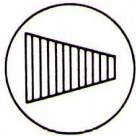
	Fluorescence	Persistence
P1	Green	Medium
P11	Blue	Short

Available in other phosphors. Please inquire.

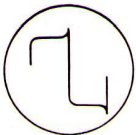
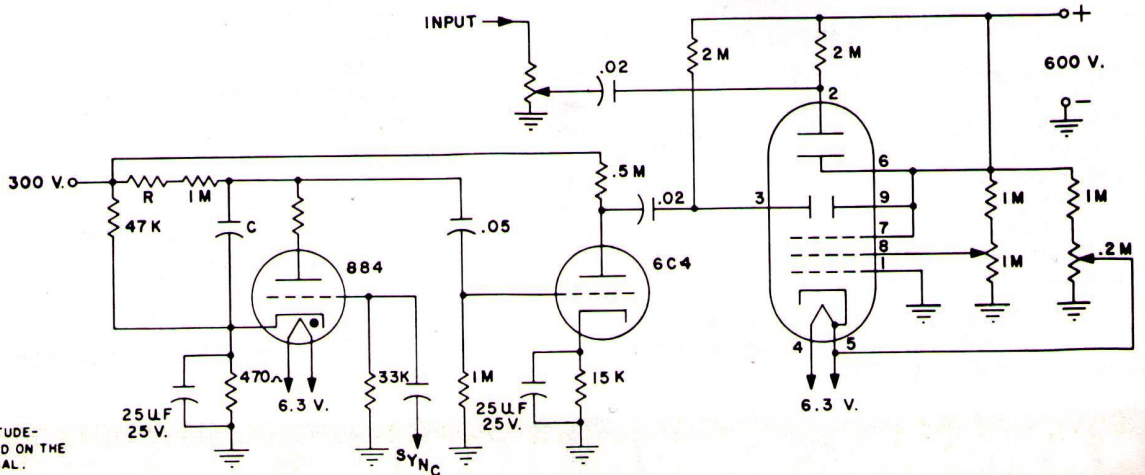
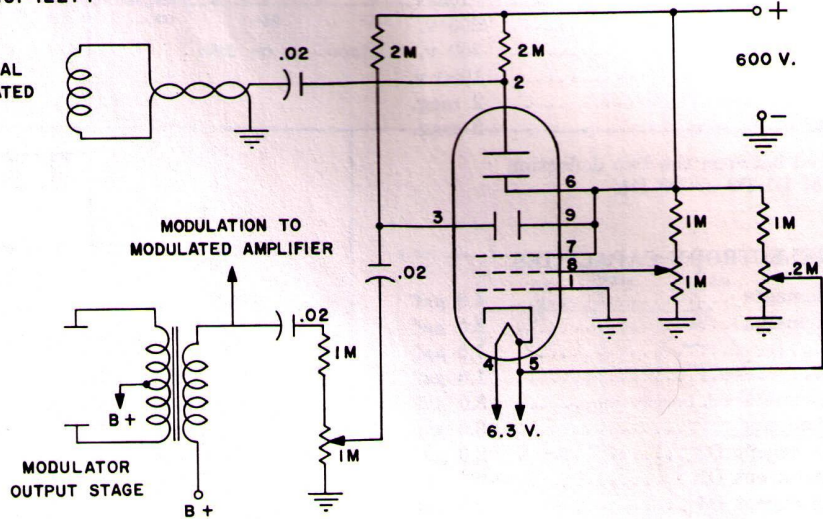


TYPICAL OPERATING CIRCUITS FOR NUP 122 P1

COUPLED TO FINAL TANK OF MODULATED AMPLIFIER



NO SWEEP OSCILLATOR IS NECESSARY WITH THIS CIRCUIT TO PRODUCE THE MODULATION CHECKING DISPLAY SHOWN ABOVE.



IN THIS WAVE-SHAPE-AND-AMPLITUDE-CHECKING CIRCUIT, R AND C DEPEND ON THE FREQUENCY OF THE APPLIED SIGNAL.