

(ba)
L-4006

C H R O M A P I X

Single Gun - Two Color Tube
(Tentative)

SINGLE GUN COLOR TUBE
5 INCH ROUND GLASS ENVELOPE
TWO-COLOR PERSISTENT PHOSPHORS
PHOSPHORS ON FLAT FACE
7/8" NECK DIAMETER
ACTIVE SCREEN AREA $4\frac{1}{4}$ " DIAMETER
SCREEN VOLTAGE UP TO 15,000 VOLTS

High resolution is afforded by phosphor strips of approximately 11 mils width on $\frac{1}{2}$ mil centers, or 80 color strips per inch. Simple circuitry is adequate for power supplies and color switching. Post-acceleration, inherent in post deflection focusing (PDF) produces high deflection sensitivity. Color convergence is inherent in the tube, independent of circuit adjustment.

APPLICATIONS

Suggested applications include: target identification, moving target identification (MTI), IFF, anti-jamming, navigational beacons, terrain clearance, plane elevation indicator, collision course indicator, etc.

DATA

GENERAL

Heater voltage (AC or DC) 6.3 volts
Heater current 0.3 amperes
Direct Interelectrode Capacitances:
Grid #1 to all other electrodes 8 uuf
Cathode to all other electrodes 4 uuf
Color selectors to each other 880 uuf
*Phosphors (medium long persistence) P2- P13
Focusing Method Electrostatic
Color Selector Method Electrostatic
Deflection Method Magnetic
Deflection Angle (Approx.) 53°

*This tube may be obtained with other standard phosphors on special order.

MECHANICAL DATA

Length 8 $\frac{3}{16}$ + $\frac{5}{16}$ in.
Weight I $\frac{3}{8}$ lb.

MAXIMUM RATINGS:

Screen (Anode) voltage (Note 1)	15,000 DC
Grid #3 voltage	7,000 DC
Grid #2 voltage	600 DC
Color Selector voltage	300 peak
Color grid to phosphor plate voltage	9,000 DC
Seeker voltage (Note 2)	350 DC
Focus voltage	-500 to + 1,000 DC
Grid #1 voltage:	
Negative bias value	200 DC
Positive bias value	0
Positive peak value	2 DC
Peak heater - cathode voltage:	
Heater neg. with respect to cathode during equip. warm-up period not to exceed 15 seconds.	410 DC
After equip. warm-up	180 DC
Heater pos. with respect to cathode	180 DC

TYPICAL OPERATION

Screen (ultor) voltage	12,000 DC
Grid #3 voltage (Note 3)	3,500-4,000 DC
Color Selector voltage	200 peak
Seeker voltage	50 to 200 DC
Grid #2 voltage	300 DC
Grid #1 voltage (Note 4)	-15 to -45 DC
Focus voltage	0 DC
Circuit values:	
Grid #1 circuit resistance	1.5 megs. max.

NOTES

1. Screen (anode) voltage is defined as the total accelerating DC potential between the cathode and the phosphor plate. This anode voltage provides the high potential necessary for the function of post deflection focusing.
2. Seeker voltage is defined as the DC potential between the color selectors and Grid #3. This voltage is such that the color selectors are negative with respect to Grid #3 and is adjusted for optimum color purity.
3. Color purity is determined by the optimum ratio of the screen voltage to the Grid #3

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voltage, seeker voltage, and centering magnet
positioning.

4. For visual extinction of focused spot.

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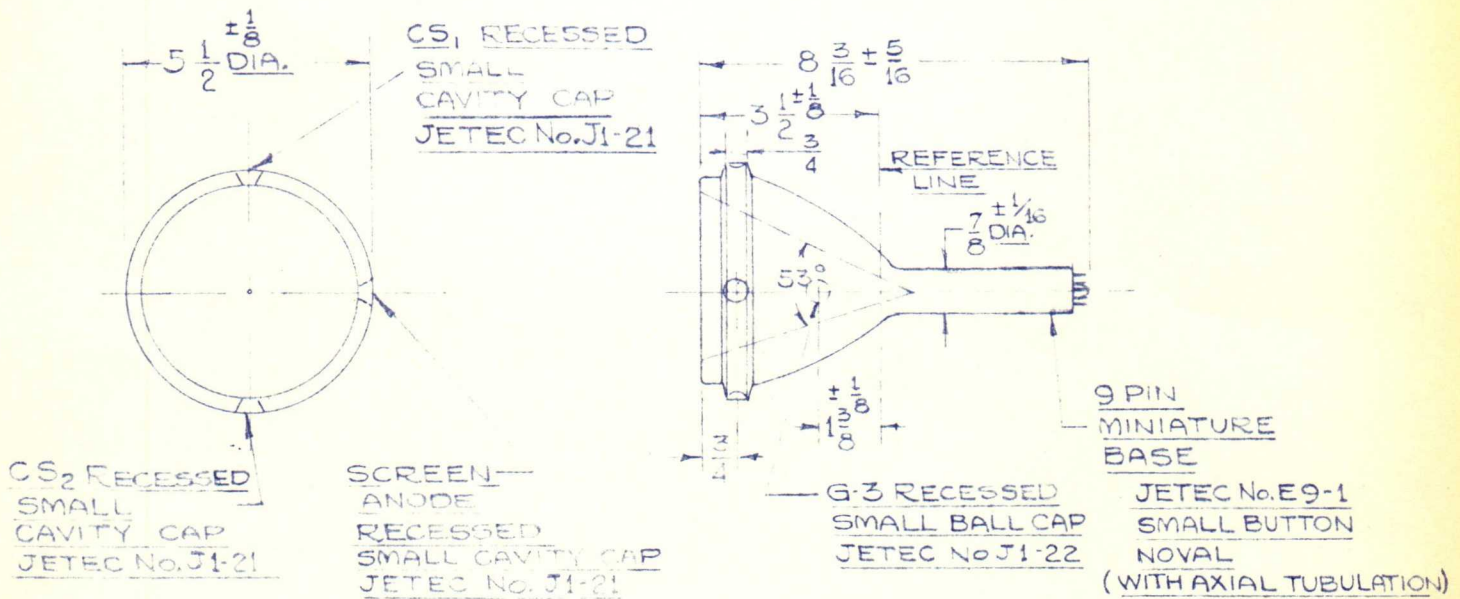
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"CHROMAPIX" 5 INCH

SMALL NECK-SHORT-COLOR CRT

DIMENSIONAL OUTLINE



BASING DIAGRAM

