TUNG-SOL -

CATHODE RAY

THE 21ASP4 IS A DIRECT-VIEW PICTURE TUBE DESIGNED FOR USE IN TELEVISION APPLICATIONS. IT IS IDENTICAL TO THE 21XP4 IN ALL RESPECTS EXCEPT THAT THE EXTERNAL CONDUCTIVE COATING IS NOT APPLIED. ITS FEATURES INCLUDE:

MAGNETIC DEFLECTION
ELECTROSTATIC FOCUS
UNIPOTENTIAL CATHODE
RECTANGULAR GLASS CONSTRUCTION

SPHERICAL FACEPLATE
GREY FILTER FACEPLATE
12 3/4" X 17" RASTER SIZE
EXTERNAL SINGLE FIELD ION TRAP

ELECTRICAL DATA

FOCUSING METHOD DEFLECTING METHOD DEFLECTION ANGLE (APPROX.):	Ε	LECTROSTATIC MAGNETIC
HOR I ZONTAL VERTICAL DIAGONAL	66 50 70	DEGREES BEGREES DEGREES
DIRECT !NTERELECTRODE CAPACITANCES (APPROX.): CATHODE TO ALL OTHER ELECTRODES GRID #1 TO ALL OTHER ELECTRODES	5 6	μμ f μμ f

OPTICAL DATA

PHOSPHOR NUMBER		P-4
FLUORESCENT COLOR		WHITE
PHOSPHORESCENT COLOR		WHITE
PERSISTENCE		MEDIUM
FACEPLATE TRANSMISSION AT CENTER (APPROX.):	72	PERCENT

RATINGS INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

HEATER VOLTAGE	6.3	VOLTS
HEATER CURRENT	0.6	AMP.
MAXIMUM DC ANODE VOLTAGE	18 000	VOLTS
MAXIMUM DC GRID #4 VOLTAGE	-500 to +1000	VOLTS
MAXIMUM DC GRID #2 VOLTAGE	500	VOLTS
MAX!MUM GRID #1 VOLTAGE:		
DC NEGATIVE—BIAS VALUE	125	VOLTS
DC POSITIVE-BIAS VALUE	0	VOLTS
POSITIVE—PEAK VALUE	2	VOLTS
MAXIMUM DC PEAK HEATER-CATHODE VOLTAGE:		
HEATER NEGATIVE WITH RESPECT TO CATHODE		
DURING WARM-UP PERIOD NOT TO EXCEED 15	seconds 410	VOLTS
AFTER EQUIPMENT WARM-UP PERIOD	180	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE	180	VOLTS
MAXIMUM GRID #1 CIRCUIT RESISTANCE	1.5	MEGOHMS

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

DC ANODE VOLTAGE 16 000	VOLTS
DC GRID #4 VOLTAGE A64 TO +352	VOLTS
DC GRID #2 VOLTAGE 300	VOLTS
DC GRID #1 VOLTAGE B -28 TO -72	VOLTS
DC ION TRAP MAGNET STANDARD COIL #117 (APPROX.) 30 ±40%	MA.
DC ION TRAP MAGNET RATED STRENGTH 35	GAUSSES

A with the combined grid \$1 bias voltage and video-signal voltage adjusted to give an anode current of 100 microamperes on 17" by 12 3/4" picture size.

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 $^{^{\}mbox{\footnotesize B}}$ visual extinction of focused raster.

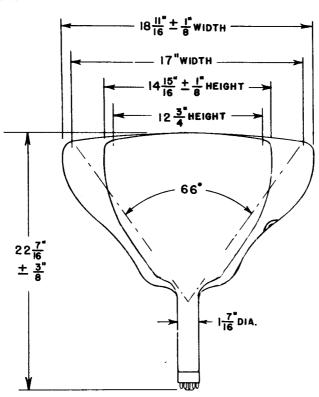
21ASP4 TENTATIVE DATA

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MECHANICAL DATA

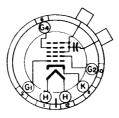
OVERALL LENGTH	22 7/16 ± 3/8	INCHES
GREATEST DIMENSIONS OF BULB:	- 6	
DIAGONAL	20 5/8 ± 3/16	INCHES
WIDTH	18 11/16 ± 1/8	INCHEIS
HEIGHT	14 15/16 ± 1/8	INCHES
MIN. USEFUL SCREEN DIMENSIONS:		
WIDTH	17	INCHES
HEIGHT	12 3/4	INCHES
BULB CONTACT	RECESSED SMALL CAVITY CAP	J 1 -21
BASE	SMALL SHELL DUODECAL 6 PIN	B6-63
BULB CONTACT ALIGNMENT		

J1-21 CONTACT ALIGNS WITH PIN POSITION #6 ± 30 DEGREES BASING



PIN CONNECTIONS

PIN 4 - HEATER PIN 2 - GRID #1 PIN 6 - GRID #4 PIN 10 - GRID #2 PIN 11 - CATHODE



PIN 12 - HEATER ANODE CAP: GRID NO.3 GRID NO.5

12L

BOTTOM VIEW