## TUMB-SOL -

## CATHODE RAY

THE 21CVP4 IS A DIRECT VIEW PICTURE TUBE DESIGNED FOR TELEVISION APPLICATIONS. ITS FEATURES INCLUDE:

ELECTROSTATIC FOCUS
MAGNETIC DEFLECTION
UNIPOTENTIAL CATHODE
EXTERNAL CONDUCTIVE COATING
REQUIRES NO ION TRAP

## ELECTRICAL DATA

FOCUSING METHOD	ELECTROSTATIC	
DEFLECTING METHOD		MAGNETIC
DEFLECTION ANGLE (APPROX.):		
HORIZONTAL	85	DEGREES
DIAGONAL	90	DEGREES
DIRECT INTERELECTRODE CAPACITANCES (APPROX.):		
CATHODE TO ALL OTHER ELECTRODES	5	μμf
GRID #1 TO ALL OTHER ELECTRODES	6	μμf
MAXIMUM EXTERNAL CONDUCTIVE COATING TO ANODE	2500	μμ f
MINIMUM EXTERNAL CONDUCTIVE COATING TO ANODE	2000	μμι f

#### OPTICAL DATA

PHOSPHOR NUMBER	SULFIDE TYPE	P-4
FLUORESCENT COLOR		WHITE
PHOSPHORESCENT COLOR		WHITE
PERSISTENCE		MEDIUM
FACEPLATE TRANSMISSION AT CENTER (APPROX.):	74	PERCENT

# RATINGS INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

HEATER VOLTAGE	6.3	VOLTS
HEATER CURRENT	0.6±10%	AMP.
MAXIMUM DC ANODE VOLTAGE	22 000	VOLTS
MAXIMUM DC GRID #4 VOLTAGE A	-550 to +1100	VOLTS
MAXIMUM DC GRID #2 VOLTAGE	550	VOLTS
MAXIMUM GRID #1 VOLTAGE:		
DC NEGATIVE-BIAS VALUE	155	VOLTS
DC POSITIVE-BIAS VALUE	Ö	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 45 SEC	ONDS 450	VOLTS

## TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

200

200

1.5

VOLTS

VOLTS

ME GOHMS

DC ANODE VOLTAGE	16 000	VOLTS
DC GRID #4 VOLTAGE	-64 to +352	VOLTS
DC GRID #2 VOLTAGE	300	VOLTS
DC GRID #4 VOLTAGE B	−28 TO −72	VOLTS

ATHE FOCUS ELECTRODE WAY BE MODULATED TO IMPROVE OVERALL FOCUS.

AFTER EQUIPMENT WARM-UP PERIOD

MAXIMUM GRID #1 CIRCUIT RESISTANCE

HEATER POSITIVE WITH RESPECT TO CATHODE

CONTINUED ON FOLLOWING PAGE

BVISUAL EXTENCTION OF FOCUSED RASTER.

12L

## TUNS-SOL

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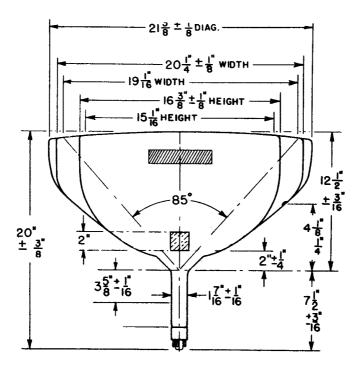
#### MECHANICAL DATA

OVERALL LENGTH	20 ± 3/8	INCHES
GREATEST DIMENSIONS OF BULB:		
DIAGONAL	21 3/8 ± 1/8	INCHES
WIDTH	20 1/4 ± 1/8	INCHES
HEIGHT	16 3/8 ± 1/8	INCHES
MIN. USEFUL SCREEN DIMENSIONS:		
WIDTH	19 1/16	INCHES
HEIGHT	15 1/16	INCHES
BULB CONTACT	RECESSED SMALL CAVITY CAP	J1-21
BASE	SMALL SHELL DUODECAL 6. PIN	B6-63

BULB CONTACT ALIGNMENT

BASING

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



## PIN CONNECTIONS

PIN 1 - 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

BOTTOM VIEW