

TUNG-SOL

CATHODE RAY

THE 21DP4 IS A DIRECT-VIEW PICTURE TUBE DESIGNED FOR USE IN TELEVISION APPLICATIONS. ITS FEATURES INCLUDE:

ELECTROSTATIC FOCUS	MAGNETIC DEFLECTION
UNIPOENTIAL CATHODE	FROSTED FILTERGLASS FACEPLATE
RECTANGULAR METAL CONSTRUCTION	EXTERNAL SINGLE FIELD ION TRAP
18 3/8" X 13 15/16" RASTER SIZE	

ELECTRICAL DATA

FOCUSING METHOD		ELECTROSTATIC
DEFLECTING METHOD		MAGNETIC
DEFLECTION ANGLE (APPROX.):		
HORIZONTAL	66	DEGREES
VERTICAL	50	DEGREES
DIAGONAL	70	DEGREES
DIRECT INTERELECTRODE CAPACITANCES (APPROX.):		
CATHODE TO ALL OTHER ELECTRODES	5	$\mu\mu\text{f}$
GRID #1 TO ALL OTHER ELECTRODES	6	$\mu\mu\text{f}$

OPTICAL DATA

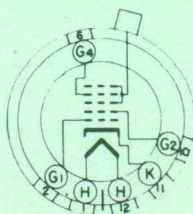
PHOSPHOR NUMBER	SULFIDE TYPE	NO. 4
FLUORESCENT COLOR		WHITE
PHOSPHORESCENT COLOR		WHITE
PERSISTENCE		SHORT
FACEPLATE LIGHT TRANSMISSION AT CENTER (APPROX.)	66	PERCENT

MECHANICAL DATA

OVERALL LENGTH	22 5/8	INCHES
GREATEST DIMENSIONS OF BULB:		
DIAGONAL	20 3/4 $\pm$ 1/4	INCHES
WIDTH	19 23/32 $\pm$ 1/8	INCHES
HEIGHT	15 5/16 $\pm$ 1/8	INCHES
MINIMUM USEFUL SCREEN DIMENSIONS:		
DIAGONAL	19 3/8	INCHES
WIDTH	18 3/8	INCHES
HEIGHT	13 15/16	INCHES
BULB CONTACT	METAL SHELL LIP	
BASE	SMALL SHELL DUODECAL 6 PIN	B6-63
BASING		12M
BULB CONTACT ALIGNMENT		
METAL SHELL LIP CONTACT ALIGNS WITH PIN POSITION #6 $\pm$ 40 DEGREES		

PIN CONNECTIONS

PIN 1 - HEATER
 PIN 2 - GRID NO. 1
 PIN 6 - GRID NO. 4
 PIN 10 - GRID NO. 2
 PIN 11 - CATHODE



PIN 12 - HEATER
 METAL SHELL LIP:
 GRID NO. 3,
 GRID NO. 5,
 COLLECTOR

BOTTOM VIEW

CONTINUED ON FOLLOWING PAGE

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RATINGS

DESIGN CENTER VALUES

HEATER VOLTAGE	6.3	VOLTS
HEATER CURRENT	0.6	AMP.
MAXIMUM DC GRID #3, GRID #5, COLLECTOR VOLTAGE	18 000	VOLTS
MAXIMUM DC GRID #4 VOLTAGE	5 000	VOLTS
MAXIMUM DC GRID #2 VOLTAGE	500	VOLTS
MAXIMUM 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

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

DC GRID #3, GRID #5, COLLECTOR VOLTAGE	14 000	VOLTS
DC GRID #2 VOLTAGE	300	VOLTS
DC GRID #1 VOLTAGE ^A	-33 TO -77	VOLTS
DC GRID #4 VOLTAGE ^B	2750 TO 3740	VOLTS
ION TRAP MAGNET (RATED STRENGTH)	40	GAUSSSES

^A VISUAL EXTINCTION OF UNDEFLECTED FOCUSED SPOT.^B WITH GRID #3, GRID #5, COLLECTOR CURRENT OF 100 UAMP.

CIRCUIT VALUES

MAXIMUM GRID #1 CIRCUIT RESISTANCE	1.5	MEGOHMS
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