

TUNG-SOL

CATHODE RAY

THE 21CDP4 AND 21CDP4A ARE DIRECT VIEW PICTURE TUBES DESIGNED FOR TELEVISION APPLICATIONS. THE TUBES ARE IDENTICAL EXCEPT FOR THE ALUMINIZED SCREEN ON THE 21CDP4A.

THEIR COMMON FEATURES INCLUDE:

MAGNETIC DEFLECTION	ELECTROSTATIC FOCUS
UNIPOTENTIAL CATHODE	GRAY FILTER FACEPLATE
EXTERNAL CONDUCTIVE COATING	EXTERNAL SINGLE FIELD ION TRAP
RECTANGULAR GLASS CONSTRUCTION	19 1/16" X 15 1/16" RASTER SIZE

ELECTRICAL DATA

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

OPTICAL DATA

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

RATINGS

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

HEATER VOLTAGE	6.3	VOLTS
HEATER CURRENT	0.45 $\pm 5\%$	AMP.
MAXIMUM DC ANODE VOLTAGE	22 000	VOLTS
MAXIMUM DC GRID #4 VOLTAGE	-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	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	450	VOLTS
AFTER EQUIPMENT WARM-UP PERIOD	200	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE	200	VOLTS
MAXIMUM GRID #1 CIRCUIT RESISTANCE	1.5	MEG OHMS
HEATER WARM-UP TIME (APPROX.) *	11.0	SECONDS

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

DC ANODE VOLTAGE	16 000	VOLTS
DC GRID #4 VOLTAGE	-64 TO +352	VOLTS
DC GRID #2 VOLTAGE	300	VOLTS
DC GRID #1 VOLTAGE ^A	-28 TO -72	VOLTS
DC ION TRAP MAGNET STANDARD COIL #117 (APPROX.)	30	MA.
DC ION TRAP MAGNET RATED STRENGTH	33	GAUSES

^A VISUAL EXTINCTION OF FOCUSED RASTER.

* HEATER WARM-UP TIME IS THE TIME REQUIRED FOR THE VOLTAGE ACROSS THE HEATER TERMINALS TO INCREASE TO 5.0 VOLTS IN THE JETEC TEST CIRCUIT, WITH $E=25$ VOLTS AND SERIES $R=42$ OHMS.

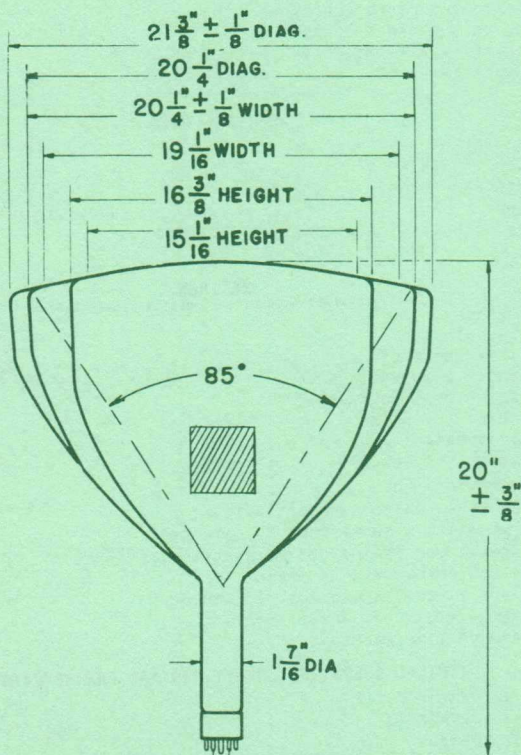
CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

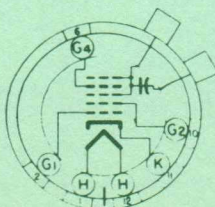
MECHANICAL DATA

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:		
DIAGONAL	20 1/4	INCHES
WIDTH	19 1/16	INCHES
HEIGHT	15 1/16	INCHES
BULB CONTACT	RECESSED SMALL CAVITY CAP	J1-21
BASE	SMALL SHELL CUODECAL 6 PIN	B6-63
BASING		12L
BULB CONTACT ALIGNMENT		
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



BOTTOM VIEW

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