

TUNG-SOL**CATHODE RAY**

THE 21CUP4 IS A DIRECT VIEW PICTURE TUBE DESIGNED FOR TELEVISION APPLICATIONS. ITS FEATURES INCLUDE:

UNIPOTENTIAL CATHODE	ALUMINIZED SCREEN
GRAY FILTER FACEPLATE	EXTERNAL CONDUCTIVE COATING
MAGNETIC FOCUS AND DEFLECTION	EXTERNAL SINGLE FIELD ION TRAP
19 1/16" X 15 1/16" RASTER SIZE	

ELECTRICAL DATA

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

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		AMP.
MAXIMUM DC ANODE VOLTAGE	0.6 $\pm 10\%$	VOLTS
MAXIMUM DC GRID #2 VOLTAGE	22 000	VOLTS
MAXIMUM DC GRID #1 VOLTAGE:	550	VOLTS
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

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

DC ANODE VOLTAGE	16 000	VOLTS
DC GRID #2 VOLTAGE	300	VOLTS
DC GRID #1 VOLTAGE ^A	-28 TO -72	VOLTS
DC FOCUSING COIL CURRENT (APPROX.)	117	MA.
DC ION TRAP MAGNET RATED STRENGTH	40	GAUSSSES

^A VISUAL EXTINCTION OF FOCUSED RASTER.

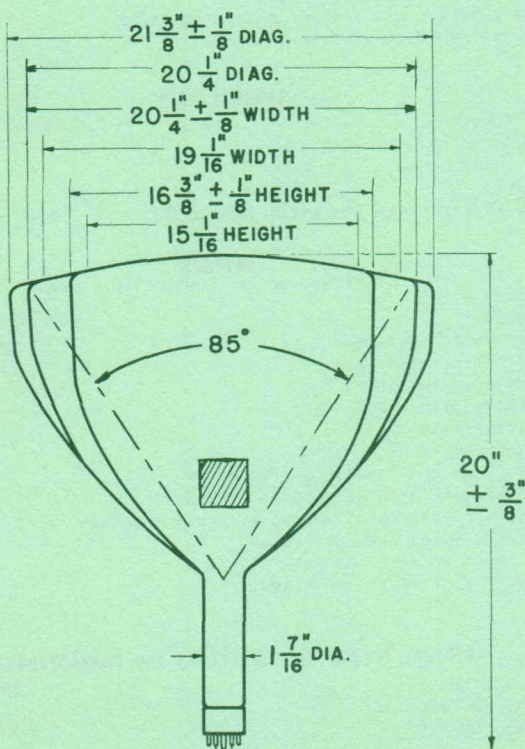
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TUNG-SOL

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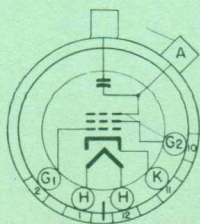
MECHANICAL DATA

OVERALL LENGTH	$20 \pm \frac{3}{8}$	INCHES
GREATEST DIMENSIONS OF BULB:		
DIAGONAL	$21 \frac{3}{8} \pm \frac{1}{8}$	INCHES
WIDTH	$20 \frac{1}{4} \pm \frac{1}{8}$	INCHES
HEIGHT	$16 \frac{3}{8} \pm \frac{1}{8}$	INCHES
MIN. USEFUL SCREEN DIMENSIONS:		
DIAGONAL	$20 \frac{1}{4}$	INCHES
WIDTH	$19 \frac{1}{16}$	INCHES
HEIGHT	$15 \frac{1}{16}$	INCHES
BULB CONTACT	RECESSED SMALL CAVITY CAP	J1-21
BASE	SMALL SHELL DUODECAL 5 PIN	B5-57
BASING		12N
BULB CONTACT ALIGNMENT		
J1-21 CONTACT ALIGNS WITH PIN POSITION #6 ± 30 DEGREES		



PIN CONNECTIONS

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



BOTTOM VIEW