# --- TUMB.SOL -

# CATHODE RAY

THE 21CDP4 AND 21CDP4A ARE DIRECT VIEW PICTURE TUBES DESIGNED FOR TELEVISION APPLICATIONS. THE TUBES ARE IDENTICAL EXCEPT FOR THE ALUM-INIZED SCREEN ON THE 21CDP4A. THEIR COMMON FEATURES INCLUDE:

> MAGNETIC DEFLECTION UNIPOTENTIAL CATHODE EXTERNAL CONDUCTIVE COATING

ELECTROSTATIC FOCUS GRAY FILTER FACEPLATE EXTERNAL SINGLE FIELD ION TRAP RECTANGULAR GLASS CONSTRUCTION 19 1/16" X 15 1/16" RASTER SIZE

#### ELECTRICAL DATA

FOCUSING METHOD	ELECTROSTATIO
DEFLECTING METHOD	MAGNETIC
DEFLECTION ANGLE (APPROX.):	MAGNETTE
HORIZONTAL	5 DEGREES
	DEGREES
DIRECT INTERELECTRODE CAPACITANCES (APPROX.):	0 02311223
CATUARS TO ALL OFFICE OF THE STATE OF THE ST	5 µµ.f
GRID #1 TO ALL OTHER ELECTRODES	5 μμ f 6 μμ f
MAXIMUM EXTERNAL CONDUCTIVE COATING TO ANODE 250	
MINIMUM EXTERNAL CONDUCTIVE COATING TO ANODE 200	
OPTICAL DATA	
PHOSPHOR NUMBER SULFIDE TYP	E F-4
FLUORESCENT COLOR	WHITE
PHOSPHORESCENT COLOR	WHITE
PERSISTENCE SHORT TO MEDIU	
FACEPLATE TRANSMISSION AT CENTER (APPROX.): 7	
μ	4 PERCENT
RATINGS	
HEATER VOLTAGE	7
HEATER CURRENT	
MAXIMUM DC ANODE VOLTAGE	
MAXIMUM DC GRID #4 VOLTAGE -550 TO +116	
MAY IMIM DC CD ID #2 VOLTAGE	
MAXIMUM GRID #4 VOLTAGE:	50 VOLTS
DC NEGATIVE TRIAC VALUE	:
DC POSITIVE-BIAS VALUE	55 VOLTS
FOSITIVE-FEAK VALUE	0 VOLTS
MAXIMUM DC PEAK HEATER-CATHODE VOLTAGE:	2 VOLTS
HEATER NEGATIVE WITH RESPECT TO CATHODE	
DURING WARASHIR REDIOD NOT TO SUGAR	
AFTER COULTMENT WARM US DECLES	-
HEATED POSITIVE WITH DECOSOT TO DITUE	
MAXIMUM GRID WA CIRCUIT DECLOTAGE	
HEATER WARM-UP TIME (ADDROV ) *	
, it	
TYPICAL OPERATING CONDITIONS AND CHARACTERISTIC	S
DC ANODE VOLTAGE	O VOLTS
DC GRID #4 VOLTAGE	
DC GRID #2 VOLTAGE	=
-28 TO -7	-
DC ION TRAP MAGNET STANDARD COIL #147 (APPROX.)	_
DC ION TRAP MAGNET RATED STRENGTH 3	

A VISUAL EXTINCTION OF FOCUSED RASTER.

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<sup>\*</sup> HEATER WARM-UP TIME IS THE TIME REQUIRED FOR THE VOLTAGE ACROSS THE HEATER TERMINALS TO IN-CREASE TO 5.0 VOLTS IN THE JETEC TEST CIRCUIT, WITH E=25 VOLTS AND SERIES R=42 OHMS.

# TUME-SOL

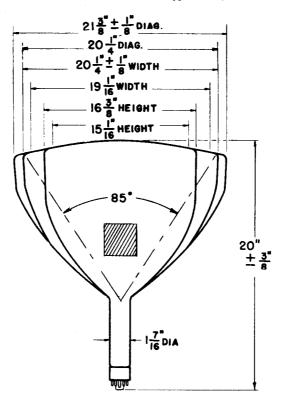
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### MECHANICAL DATA

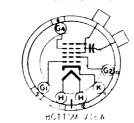
OVERALL LENGTH 20 ± 3/8 INCHES GREATEST DIMENTSIONS OF BULB: DIAGONAL 21 3/8 ± 1/8 INCHES WIDTH 20 1/4 ± 1/8 INCHES HE I GHT 16 3/8 ± 1/8 INCHES MIN. USEFUL SCREEN DIMENSIONS: 20 1/4 DIAGONAL INCHES 19 1/16 WIDTH INCHES HEIGHT 15 1/16 INCHES BULB CONTACT RECESSED SMALL CAVITY CAP J1-21 BASE SMALL SHELL CUODECAL 6 PIN B6-63 BASING 12L BULB CONTACT ALIGNMENT

BULB CONTACT ALIGNMENT

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



#### PIN CONNECTIONS



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

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

PIN 1 - HEATER

PIN 2 - GRID #1