TUNG-SOL

CATHODE RAY

THE 17CDP4 IS A VERY SHORT DIRECT-VIEW PICTURE TUBE DESIGNED FOR TELEVISION APPLICATIONS. ITS FEATURES INCLUDE:

ALUMINIZED SCREEN	**ELECTROSTATIC FOCUS**
MAGNETIC DEFLECTION	**UNIPOTENTIAL CATHODE**
GRAY FILTER FACEPLATE	**DOES NOT REQUIRE ION TRAP**
EXTERNAL CONDUCTIVE COATING	**RECTANGULAR GLASS CONSTRUCTION**
CONTROLLED HEATER WARM-UP TIME	**14 3/4" X 11 11/16" RASTER SIZE**

ELECTRICAL DATA

FOCUSING METHOD		ELECTROSTATIC
DEFLECTING METHOD		MAGNETIC
DEFLECTION ANGLE (APPROX.):		
HORIZONTAL	105	DEGREES
VERTICAL	87	DEGREES
DIAGONAL	110	DEGREES
DIRECT INTERELECTRODE CAPACITANCES (APPROX.)		
CATHODE TO ALL OTHER ELECTRODES	5	$\mu\mu$f
GRID #1 TO ALL OTHER ELECTRODES	6	$\mu\mu$f
MAXIMUM EXTERNAL CONDUCTIVE COATING TO ANODE	1500	$\mu\mu$f
MINIMUM EXTERNAL CONDUCTIVE COATING TO ANODE	800	$\mu\mu$f

OPTICAL DATA

PHOSPHOR NUMBER	SULFIDE TYPE	P-4
FLUORESCENT COLOR		WHITE
PHOSPHORESCENT COLOR		WHITE
PERSISTENCE		SHORT
FACEPLATE TRANSMISSION AT CENTER (APPROX.):	78	PERCENT

RATINGS

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

GRID DRIVE SERVICE[A]

HEATER VOLTAGE	8.4	VOLTS
HEATER CURRENT	0.45	AMP.
MAXIMUM DC ANODE VOLTAGE	16 000	VOLTS
MAXIMUM DC GRID #4 VOLTAGE	-500 TO +1000	VOLTS
MAXIMUM DC GRID #2 VOLTAGE	500	VOLTS
MAXIMUM GRID #1 VOLTAGE:		
DC NEGATIVE-BIAS VALUE	140	VOLTS
DC POSITIVE-BIAS VALUE	0	VOLTS
POSITIVE-PEAK VALUE	2	VOLTS
MAXIMUM DC PEAK HEATER-CATHODE VOLTAGE:		
HEATER NEGATIVE WITH RESPECT TO CATHODE	180	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE	180	VOLTS
HEATER WARM-UP TIME (APPROX.)	11.0	SECONDS
MAXIMUM GRID #1 CIRCUIT RESISTANCE	1.5	MEGOHMS

[A] GRID DRIVE IS THE OPERATING CONDITION IN WHICH THE VIDEO SIGNAL VARIES THE GRID #1 POTENTIAL WITH RESPECT TO CATHODE.

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RATINGS - CONT'D.

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

CATHODE DRIVE SERVICE[B]

HEATER VOLTAGE	8.4	VOLTS
HEATER CURRENT	0.45	AMP.
MAXIMUM DC ANODE VOLTAGE	16 000	VOLTS
MAXIMUM DC GRID #4 VOLTAGE	-500 TO +1000	VOLTS
MAXIMUM GRID #1 VOLTAGE:		
DC NEGATIVE-BIAS VALUE	140	VOLTS
DC POSITIVE-BIAS VALUE	0	VOLTS
POSITIVE-PEAK VALUE	2	VOLTS
MAXIMUM DC PEAK HEATER-CATHODE VOLTAGE:		
HEATER NEGATIVE WITH RESPECT TO CATHODE	180	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE	180	VOLTS
MAXIMUM GRID #2 TO GRID #1 VOLTAGE	640	VOLTS
MAXIMUM GRID #2 TO CATHODE VOLTAGE	500	VOLTS
MAXIMUM GRID #1 CIRCUIT RESISTANCE	1.5	MEGOHMS

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

GRID DRIVE SERVICE

DC ANODE VOLTAGE	14 000	VOLTS
DC GRID #4 VOLTAGE	0 TO 400	VOLTS
DC GRID #2 VOLTAGE	300	VOLTS
DC GRID #1 VOLTAGE[C]	-28 TO -72	VOLTS

CATHODE DRIVE SERVICE

DC ANODE VOLTAGE	14 000	VOLTS
DC GRID #4 VOLTAGE	0 TO 400	VOLTS
DC GRID #2 VOLTAGE	300	VOLTS
DC GRID #1 VOLTAGE[C]	28 TO 60	VOLTS

[B] CATHODE DRIVE IS THE OPERATING CONDITION IN WHICH THE VIDEO SIGNAL VARIES THE CATHODE POTENTIAL WITH RESPECT TO GRID #1 AND THE OTHER ELECTRODES.

[C] VISUAL EXTINCTION ON FOCUSED RASTER.

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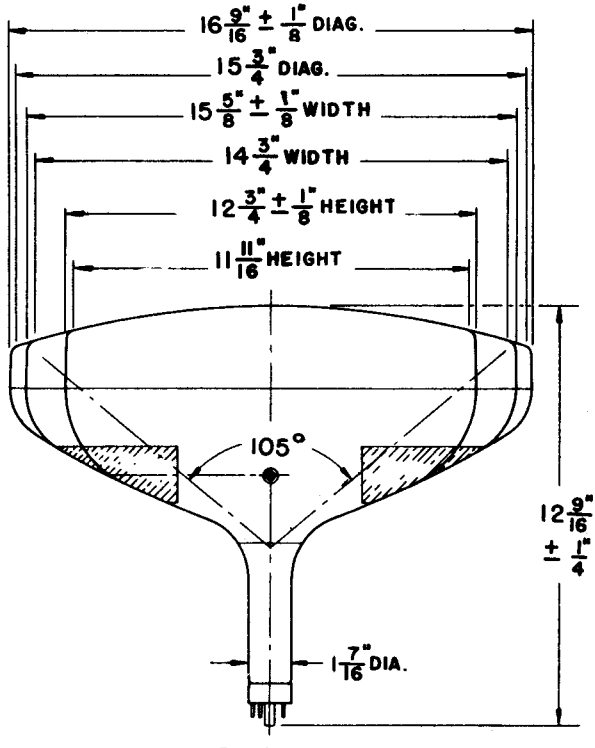
MECHANICAL DATA

OVERALL LENGTH	12 9/16 ± 1/4	INCHES
GREATEST DIMENSIONS OF BULB:		
DIAGONAL	16 9/16 ± 1/8	INCHES
WIDTH	15 5/8 ± 1/8	INCHES
HEIGHT	12 3/4 ± 1/8	INCHES
MIN. USEFUL SCREEN DIMENSIONS:		
DIAGONAL	15 3/4	INCHES
WIDTH	14 3/4	INCHES
HEIGHT	11 11/16	INCHES
BULB CONTACT	RECESSED SMALL CAVITY CAP	J1-21
BASE	SMALL BUTTON EIGHTAR 7 PIN-STYLE 8	B7-183
BASING		8HR

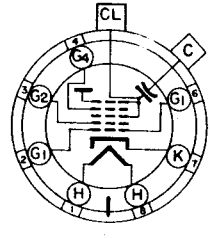
BULB CONTACT ALIGNMENT

J1-21 CONTACT ALIGNS WITH PIN POSITION #4 ± 30 DEGREES



PIN CONNECTIONS

PIN 1 – HEATER
PIN 2 – GRID #1
PIN 3 – GRID #2
PIN 4 – GRID #4
PIN 6 – GRID #1
PIN 7 – CATHODE



BOTTOM VIEW

PIN 8 – HEATER
ANODE CAP:
GRID NO. 3
GRID NO. 5