

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	$\mu\mu\text{f}$
GRID #1 TO ALL OTHER ELECTRODES	6	$\mu\mu\text{f}$
MAXIMUM EXTERNAL CONDUCTIVE COATING TO ANODE	1500	$\mu\mu\text{f}$
MINIMUM EXTERNAL CONDUCTIVE COATING TO ANODE	800	$\mu\mu\text{f}$

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	MEG OHMS

^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.

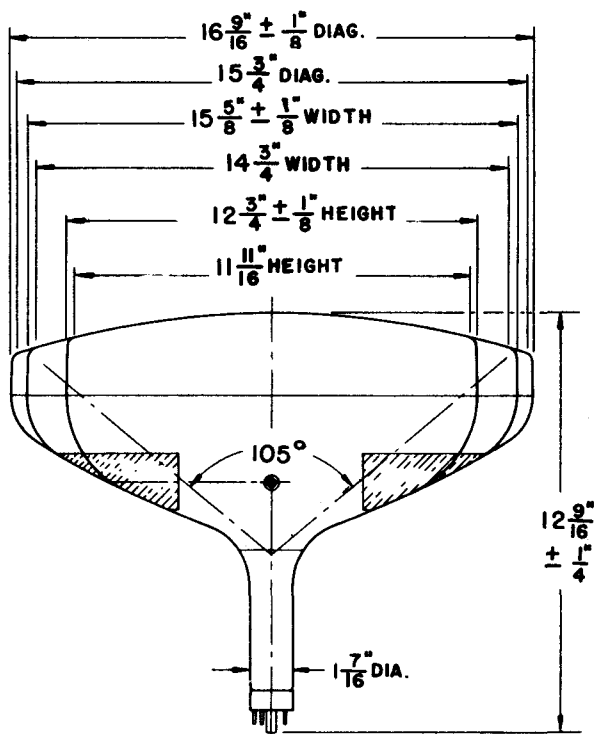
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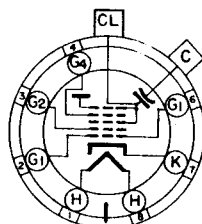
MECHANICAL DATA

OVERALL LENGTH	12 $\frac{9}{16}$ $\pm$ $\frac{1}{4}$	INCHES
GREATEST DIMENSIONS OF BULB:		
DIAGONAL	16 $\frac{9}{16}$ $\pm$ $\frac{1}{8}$	INCHES
WIDTH	15 $\frac{5}{8}$ $\pm$ $\frac{1}{8}$	INCHES
HEIGHT	12 $\frac{3}{4}$ $\pm$ $\frac{1}{8}$	INCHES
MIN. USEFUL SCREEN DIMENSIONS:		
DIAGONAL	15 $\frac{3}{4}$	INCHES
WIDTH	14 $\frac{3}{4}$	INCHES
HEIGHT	11 $\frac{11}{16}$	INCHES
BULB CONTACT	RECESSED SMALL CAVITY CAP	J1-21
BASE	SMALL BUTTON EIGHTAR 7 PIN-STYLE B	87-183
BASING		8HR
BULB CONTACT ALIGNMENT		
J1-21 CONTACT ALIGNS WITH PIN POSITION #4 $\pm$ 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



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

BOTTOM VIEW