

TUNG-SOL

CATHODE RAY

THE 17FP4 AND 17FP4A ARE DIRECT VIEW PICTURE TUBES DESIGNED FOR USE IN TELEVISION APPLICATIONS. THEY ARE IDENTICAL WITH THE FOLLOWING EXCEPTION:

17FP4 - PARTIAL EXTERNAL COATING

17FP4A - COMPLETE EXTERNAL COATING

THEIR COMMON FEATURES INCLUDE:

ELECTROSTATIC FOCUS	MAGNETIC DEFLECTION
UNIPOTENTIAL CATHODE	GREY FILTER FACEPLATE
RECTANGULAR GLASS CONSTRUCTION	EXTERNAL SINGLE FIELD ION TRAP
14 1/4" X 11 1/8" RASTER SIZE	

ELECTRICAL DATA

FOCUSING METHOD		ELECTROSTATIC
DEFLECTING METHOD		MAGNETIC
DEFLECTION ANGLE (APPROX.)		
HORIZONTAL	65	DEGREES
DIAGONAL	70	DEGREES
DIRECT INTERELECTRODE CAPACITANCES (APPROX.)		
CATHODE TO ALL OTHER ELECTRODES	5	$\mu\mu f$
GRID #1 TO ALL OTHER ELECTRODES	6	$\mu\mu f$
	17FP4A	17FP4
MAXIMUM EXTERNAL CONDUCTIVE COATING TO ANODE	2000	750
MINIMUM EXTERNAL CONDUCTIVE COATING TO ANODE	750	500
		$\mu\mu f$

OPTICAL DATA

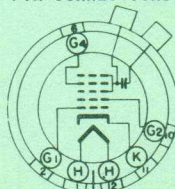
PHOSPHOR NUMBER	NO. 4
FLUORESCENT COLOR	WHITE
PHOSPHORESCENT COLOR	WHITE
PERSISTENCE	MEDIUM
FACEPLATE LIGHT TRANSMISSION AT CENTER (APPROX.)	66 PERCENT

MECHANICAL DATA

OVERALL LENGTH	19 1/4 $\pm$ 3/8	INCHES
GREATEST DIMENSIONS OF BULB		
DIAGONAL	16 5/8 $\pm$ 1/8	INCHES
WIDTH	15 3/8 $\pm$ 1/8	INCHES
HEIGHT	12 1/4 $\pm$ 1/8	INCHES
MINIMUM USEFUL SCREEN DIMENSIONS		
DIAGONAL	15 1/2	INCHES
WIDTH	14 1/4	INCHES
HEIGHT	11 1/8	INCHES
BULB CONTACT	RECESSED SMALL CAVITY CAP	J1-21
BASE	SMALL SHELL DUODECAL 6 PIN	B6-63
BASING		42L
BULB CONTACT ALIGNMENT		
J1-21 CONTACT ALIGNS WITH PIN POSITION #6 $\pm$ 30 DEGREES		

PIN CONNECTIONS

PIN 1 - HEATER
PIN 2 - GRID NO. 1
PIN 6 - GRID NO. 4
PIN 10 - GRID NO. 2
PIN 11 - CATHODE



BOTTOM VIEW

PIN 12 - HEATER
ANODE CAP:
GRID #3,
GRID #5,
COLLECTOR

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RATINGS

DESIGN CENTER VALUES

HEATER VOLTAGE	6.3	VOLTS
HEATER CURRENT	0.6	AMP.
MAXIMUM DC GRID #3, GRID #5, COLLECTOR VOLTAGE ^A	18 000	VOLTS
MAXIMUM DC ANODE #1 VOLTAGE	5 000	VOLTS
MAXIMUM DC GRID #2 VOLTAGE	410	VOLTS
MAXIMUM GRID #1 VOLTAGE		
DC NEGATIVE-BIAS VALUE	125	VOLTS
DC POSITIVE-BIAS VALUE	0	VOLTS
POSITIVE-PEAK VALUE	2	VOLTS
MAXIMUM DC PEAK HEATER-CATHODE VOLTAGE ^B		
HEATER NEGATIVE WITH RESPECT TO CATHODE		
DURING WARM-UP PERIOD NOT TO EXCEED 15 SECONDS	410	VOLTS
AFTER EQUIPMENT WARM-UP PERIOD	150	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE	150	VOLTS

^A IF THIS TUBE IS OPERATED AT VOLTAGE IN EXCESS OF 16,000 VOLTS, X-RAY RADIATION SHIELDING MAY BE NECESSARY TO AVERT POSSIBLE DANGER OF PERSONAL INJURY FROM PROLONGED EXPOSURE AT CLOSE RANGE.

^B CATHODE SHOULD BE RETURNED TO ONE SIDE OR TO THE MIDTAP OF THE HEATER TRANSFORMER WINDING.

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

DC GRID #3, GRID #5, COLLECTOR VOLTAGE	12 000	VOLTS
DC ANODE #1 VOLTAGE (FOCUSING ELECTRODE) ^C	2300 TO 3550	VOLTS
DC GRID #2 VOLTAGE	300	VOLTS
DC GRID #1 VOLTAGE ^D	-33 TO -77	VOLTS
DC ION TRAP CURRENT STANDARD COIL #111 (APPROX.)	75 $\pm$ 50%	MA.
ION TRAP FIELD INTENSITY (APPROX.)	35	GAUSSSES

^C WITH THE COMBINED GRID #1 BIAS VOLTAGE AND VIDEO-SIGNAL VOLTAGE ADJUSTED TO GIVE AN ANODE CURRENT OF 100 MICROAMPERES ON A 10 3/4" X 14 1/4" PICTURE SIZE.

^D VISUAL EXTINCTION OF UNDEFLECTED FOCUSING SPOT.

CIRCUIT VALUES

MAXIMUM GRID #1 CIRCUIT RESISTANCE	1.5	MEGOHMS
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