

TUNG-SOL**CATHODE RAY**

THE 16FP4 IS A DIRECT-VIEW PICTURE TUBE DESIGNED FOR USE IN TELEVISION APPLICATIONS. ITS FEATURES INCLUDE:

UNIPOTENTIAL CATHODE	ROUND GLASS CONSTRUCTION
MAGNETIC FOCUS & DEFLECTION	EXTERNAL SINGLE FIELD ION TRAP
10 1/4" X 13 1/2" RASTER SIZE	

ELECTRICAL DATA

FOCUSING METHOD		MAGNETIC
DEFLECTING METHOD		MAGNETIC
DEFLECTION ANGLE (APPROX.)	62	DEGREES
DIRECT INTERELECTRODE CAPACITANCES (APPROX.):		
CATHODE TO ALL OTHER ELECTRODES	5	μf
GRID #1 TO ALL OTHER ELECTRODES	7	μf

OPTICAL DATA

PHOSPHOR NUMBER	NO. 4
FLUORESCENT COLOR	WHITE
PHOSPHORESCENT COLOR	WHITE
PERSISTENCE	MEDIUM

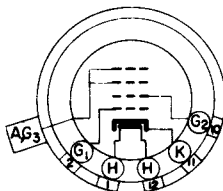
MECHANICAL DATA

OVERALL LENGTH	20 1/4 $\pm$ 3/8	INCHES
GREATEST DIAMETER OF BULB	16 1/8 $\pm$ 1/4	INCHES
MINIMUM USEFUL SCREEN DIAMETER	15	INCHES
MINIMUM USEFUL SCREEN DIMENSIONS		
WIDTH	13 1/2	INCHES
HEIGHT	10 1/4	INCHES
BULB CONTACT	RECESSED SMALL BALL CAP	J1-22
BASE	SMALL SHELL DUODECAL 5 PIN	B5-57
BASING		120
BULB CONTACT ALIGNMENT		
J1-22 CONTACT ALIGNS WITH PIN POSITION #3 $\pm$ 10 DEGREES		

PIN CONNECTIONS

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

PIN 12 - HEATER
 ANODE CAP:
 GRID NO. 3



BOTTOM VIEW

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

RATINGS

DESIGN CENTER VALUES

HEATER VOLTAGE	6.3	VOLTS
HEATER CURRENT	0.6	AMP.
MAXIMUM DC ANODE, GRID #3 VOLTAGE	16 000	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:		
HEATER NEGATIVE WITH RESPECT TO CATHODE		
DURING WARM-UP PERIOD NOT TO EXCEED 15 SECONDS	410	VOLTS
AFTER EQUIPMENT WARM-UP PERIOD	140	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE	140	VOLTS

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

DC ANODE, GRID #3 VOLTAGE	13 000	VOLTS
DC GRID #2 VOLTAGE	250	VOLTS
DC GRID #1 VOLTAGE ^A	-27 TO -63	VOLTS
DC FOCUSING COIL CURRENT (APPROX.) ^B	146	MA.
DC ION TRAP CURRENT STANDARD COIL #111 (APPROX.)	105	MA.

^A VISUAL EXTINCTION OF UNDEFLECTED FOCUSED SPOT.^B FOR STANDARD FOCUS COIL #106, OR EQUIVALENT, WITH THE COMBINED GRID #1 BIAS VOLTAGE AND VIDEO SIGNAL VOLTAGE ADJUSTED TO PRODUCE A HIGHLIGHT BRIGHTNESS OF 35 FOOT LAMBERTS ON A 10 1/4" BY 13 1/2" PICTURE SIZE. DISTANCE FROM REFERENCE LINE TO CENTER OF AIR GAP ON FOCUS COIL SHALL BE 3.0 INCHES.

CIRCUIT VALUES

MAXIMUM GRID #1 CIRCUIT RESISTANCE	1.5	MEGOHMS
------------------------------------	-----	---------

TUNG-SOL

