

## TUNG-SOL

## CATHODE RAY

THE 16JP4 AND 16JP4A ARE DIRECT-VIEW PICTURE TUBES DESIGNED FOR USE IN TELEVISION APPLICATIONS. THEY ARE IDENTICAL EXCEPT FOR THE GREY FILTER FACEPLATE USED ON THE 16JP4A. THEIR COMMON FEATURES INCLUDE:

UNIPOTENTIAL CATHODE                      ROUND GLASS CONSTRUCTION  
MAGNETIC FOCUS & DEFLECTION            EXTERNAL CONDUCTIVE COATING  
EXTERNAL DOUBLE FIELD ION TRAP

## MECHANICAL DATA

FOCUSING METHOD		
DEFLECTING METHOD		MAGNETIC
DEFLECTION ANGLE (APPROX.)	60	MAGNETIC
DIRECT INTERELECTRODE CAPACITANCES (APPROX.):		DEGREES
CATHODE TO ALL OTHER ELECTRODES	5	$\mu\mu\text{f}$
GRID #1 TO ALL OTHER ELECTRODES	6.5	$\mu\mu\text{f}$
MAXIMUM EXTERNAL CONDUCTIVE COATING TO ANODE	2 000	$\mu\mu\text{f}$
MINIMUM EXTERNAL CONDUCTIVE COATING TO ANODE	750	$\mu\mu\text{f}$

## OPTICAL DATA

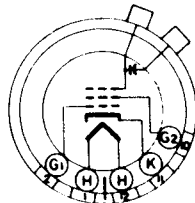
PHOSPHOR NUMBER	SULFIDE	NO. 4
FLUORESCENT COLOR		WHITE
PHOSPHORESCENT COLOR		WHITE
PERSISTENCE		MEDIUM
FACEPLATE LIGHT TRANSMISSION AT CENTER (APPROX.)	66	PERCENT

## MECHANICAL DATA

OVERALL LENGTH	20 $\frac{3}{4}$ $\pm$ $\frac{3}{8}$	INCHES
GREATEST DIAMETER OF BULB	16 $\frac{1}{8}$ $\pm$ $\frac{1}{4}$	INCHES
MINIMUM USEFUL SCREEN DIAMETER	15	INCHES
BULB CONTACT	RECESSED SMALL CAVITY CAP	J1-21
BASE	SMALL SHELL DUODECAL 5 PIN	B5-57
BASING		12N
BULB CONTACT ALIGNMENT		
	J1-21 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

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 VOLTAGE	14 000	VOLTS
MAXIMUM DC GRID #2 VOLTAGE	410	VOLT <sup>6</sup>
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	125	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE	125	VOLTS

## TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

DC ANODE VOLTAGE	11 000	VOLTS
DC GRID #2 VOLTAGE	250	VOLTS
DC GRID #1 VOLTAGE <sup>A</sup>	-33 TO -77	VOLTS
DC FOCUSING COIL CURRENT (APPROX.)	115	MA.
DC ION TRAP CURRENT STANDARD COIL #108 (APPROX.)	120	MA.

<sup>A</sup> VISUAL EXTINCTION OF UNDEFLECTED FOCUSED SPOT.

## CIRCUIT VALUES

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

TUNG-SOL

