- TUNG-SOL ----

CATHODE RAY

THE 16LP4 AND 16LP4A ARE DIRECT - VIEW PICTURE TUBES DESIGNED FOR USE IN TELEVISION APPLICATIONS. THEY ARE IDENTICAL EXCEPT FOR THE GREY FILTER FACEPLATE USED ON THE 16LP4A. THEIR COMMON FEATURES INCLUDE:

MAGNETIC FOCUS & DEFLECTION EXTERNAL CONDUCTIVE COATING

UNIPOTENTIAL CATHODE ROUND GLASS CONSTRUCTION EXTERNAL DOUBLE FIELD ION TRAP 10 1/4" X 14 1/2" RASTER SIZE

ELECTRICAL DATA

FOCUSING METHOD DEFLECTING METHOD		MAGNETIC MAGNETIC
DEFLECTION ANGLE (APPROX.)	52	DEGREES
DIRECT INTERELECTRODE CAPACITANCES (APPROX.): CATHODE TO ALL OTHER ELECTRODES	5	μμf
GRID #1 TO ALL OTHER ELECTRODES MAXIMUM EXTERNAL CONDUCTIVE COATING TO ANODE	6 2 000	μμf μμf
MINIMUM EXTERNAL CONDUCTIVE COATING TO ANODE	750	μμf

OPTICAL DATA

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

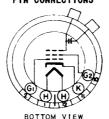
MECHANICAL DATA

OVERALL LENGTH	22 1/4 ± 3/8	INCHES
GREATEST DIAMETER OF BULB	15 7/8 ± 1/8	INCHES
MINIMUM USEFUL SCREEN DIAMETER	14 1/2	INCHES
BULB CONTACT	RECESSED SMALL CAVITY CAP	J1-21
BASE	SMALL SHELL DUODECAL 5 PIN	BS-57
BASING		12N

BULB CONTACT ALIGNMENT J1-21 CONTACT ALIGNS WITH PIN POSITION #3 ± 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

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RATINGS DESIGN CENTER VALUES

HEATER VOLTAGE HEATER CURRENT	6.3 0.6	VOLTS AMP.
MAXIMUM DC ANODE VOLTAGE	14 000	VOLTS
MAXIMUM DC GRID #2 VOLTAGE	410	VOLTS
MAXIMUM GRID #1 VOLTAGE:		
DC NEGATIVE-BIAS VALUE	125	VOLTS
DC POSITIVE-BIAS VALUE	0	VOL TS
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	12 000	VOLTS
DC GRID #2 VOLTAGE	300	VOLTS
DC GRID #1 VOLTAGE ^A	−33 TO −77	VOLTS
DC FOCUSING COIL CURRENT (APPROX.) B	110	MA.
DC ION TRAP CURRENT STANDARD COIL #108 (APPROX.)	120	MA.

Avisual extinction of underlected focused spot.

CIRCUIT VALUES

MAXIMUM GRID #1 CIRCUIT RESISTANCE 1.5 MEGOHMS

BFOR STANDARD FOCUS COIL #106, OR EQUIVALENT, WITH THE COMBINED GRID #1 BIAS VOLTAGE AND VIDEO SIGNAL VOLTAGE ADJUSTED TO PRODUCE A MIGHLIGHT BRIGHTNESS OF 20 FOOT LAMBERTS ON A 10 1/4" BY 14 1/2" PICTURE SIZE. DISTANCE FROM REFERENCE LINE TO CENTER OF AIR GAP ON FOCUS COIL SHALL BE 3, 25 INCHES.

