

TUNG-SOL

CATHODE RAY

THE 17LP4 AND 17LP4A ARE DIRECT VIEW PICTURE TUBES DESIGNED FOR USE IN TELEVISION APPLICATIONS. THEY ARE IDENTICAL WITH THE FOLLOWING *EXCEPTION*:

17LP4 - ALUMINIZED SCREEN

THEIR COMMON FEATURES INCLUDE:

MAGNETIC DEFLECTION	GREY FILTER FACEPLATE
CYLINDRICAL FACEPLATE	1 $\frac{1}{4}$ " X 10 $\frac{3}{4}$ " RASTER SIZE
EXTERNAL CONDUCTIVE COATING	EXTERNAL SINGLE FIELD ION TRAP
RECTANGULAR GLASS CONSTRUCTION	LOW VOLTAGE ELECTROSTATIC FOCUS

ELECTRICAL DATA

		ELECTROSTATIC
FOCUSING METHOD		MAGNETIC
DEFLECTING METHOD		
DEFLECTION ANGLE (APPROX.)		
HORIZONTAL	65	DEGREES
DIAGONAL	70	DEGREES
DIRECT INTERELECTRODE CAPACITANCES (APPROX.)		
CATHODE TO ALL OTHER ELECTRODES	5	μmf
GRID #1 TO ALL OTHER ELECTRODES	6	μmf
MAXIMUM EXTERNAL CONDUCTIVE COATING TO COLLECTOR	1 500	μmf
MINIMUM EXTERNAL CONDUCTIVE COATING TO COLLECTOR	750	μmf

OPTICAL DATA

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

RATINGS

DESIGN CENTER VALUES

HEATER VOLTAGE	6.3	VOLTS
HEATER CURRENT	0.6	AMP.
MAXIMUM DC GRID #3, GRID #5, COLLECTOR 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	125	VOLTS
DC POSITIVE-BIAS VALUE	0	VOLTS
PEAK POSITIVE 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	180	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE	180	VOLTS
MAXIMUM GRID #1 CIRCUIT RESISTANCE	1.5	MEGOHMS

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

DC GRID #3, GRID #5, COLLECTOR VOLTAGE	12 000	VOLTS
DC GRID #2 VOLTAGE	300	VOLTS
DC GRID #1 VOLTAGE ^B	-33 TO -77	VOLTS
DC GRID #4 VOLTAGE (APPROX.) ^C	-48 TO +260	VOLTS
GRID #4 CURRENT	-15 TO +25	$\mu\text{AMP.}$
GRID #2 CURRENT	-15 TO +15	$\mu\text{AMP.}$
ION TRAP FIELD STRENGTH (APPROX.) ^D	35	GAUSSES

^B VISUAL EXTINCTION OF UNDEFLECTED FOCUSED SPOT.

^C COVER THE USEFUL RANGE OF COLLECTOR VOLTAGE, GRID #4 REQUIRED FOR FOCUS OF FROM -0.4 TO +2.2% OF THE COLLECTOR VOLTAGE.

^D FOR SINGLE FIELD ION TRAP MAGNET, RETMA #111 OR EQUIVALENT.

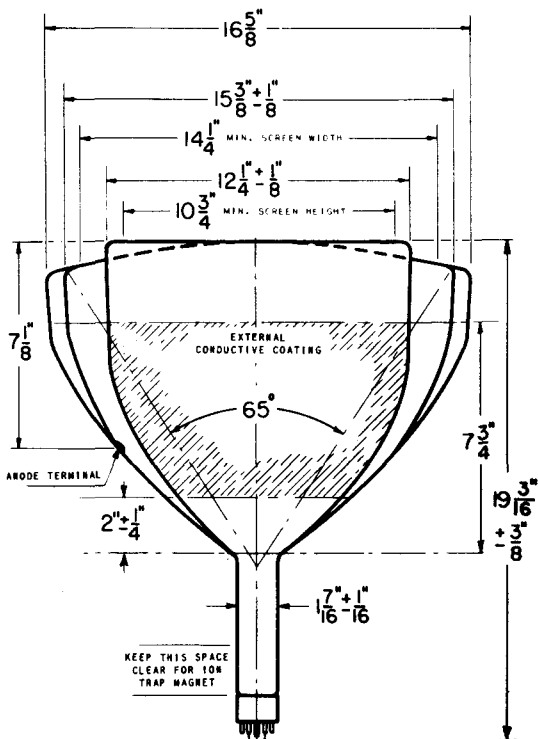
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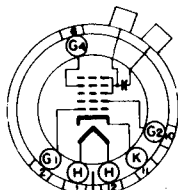
MECHANICAL DATA

OVERALL LENGTH	19 3/16 ± 3/8	INCHES
GREATEST DIMENSIONS OF BULB		
DIAGONAL	16 5/8 ± 1/8	INCHES
WIDTH	15 3/8 ± 1/8	INCHES
HEIGHT	12 1/4 ± 1/8	INCHES
MINIMUM USEFUL SCREEN DIMENSIONS		
DIAGONAL	15 5/16	INCHES
WIDTH	14 1/4	INCHES
HEIGHT	10 3/4	INCHES
BULB CONTACT	RECESSED SMALL CAVITY CAP	J1-21
BASE	SMALL SHELL DUODECAL 6 PIN	B6-63
BASING		12L
BULB CONTACT ALIGNMENT		
J1-21 CONTACT ALIGNS WITH PIN POSITION #6 ± 30 DEGREES		



PIN CONNECTIONS

PIN 1 - HEATER
 PIN 2 - GRID NO. 1
 PIN 6 - GRID NO. 4
 PIN 10 - GRID NO. 2
 PIN 14 - CATHODE



PIN 12 - HEATER
 ANODE CAP:
 GRID NO. 3
 GRID NO. 5
 COLLECTOR

BOTTOM VIEW