

TUNG-SOL**CATHODE RAY**

THE 17HP4, 17HP4A AND 17HP4B ARE DIRECT VIEW PICTURE TUBES DESIGNED FOR USE IN TELEVISION APPLICATIONS. THEY ARE IDENTICAL WITH THE FOLLOWING EXCEPTIONS:

17HP4 - GREY FILTER FACEPLATE 17HP4A - GREY PROSTED FILTER FACEPLATE
17HP4B - ALUMINIZED SCREEN

THEIR COMMON FEATURES INCLUDE:

ELECTROSTATIC FOCUS MAGNETIC DEFLECTION
UNIPOTENTIAL CATHODE EXTERNAL CONDUCTIVE COATING
RECTANGULAR GLASS CONSTRUCTION EXTERNAL SINGLE FIELD ION TRAP
10 3/4" X 14 1/4" RASTER SIZE

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	μf
GRID #1 TO ALL OTHER ELECTRODES	6	μf
MAXIMUM EXTERNAL CONDUCTIVE COATING TO ANODE	1 500	μf
MINIMUM EXTERNAL CONDUCTIVE COATING TO ANODE	750	μf

OPTICAL DATA

PHOSPHOR NUMBER		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	VOLTS
MAXIMUM DC GRID #2 VOLTAGE	500	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	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	14 000	VOLTS
DC GRID #4 VOLTAGE	-56 TO 310	VOLTS
DC GRID #2 VOLTAGE	300	VOLTS
DC GRID #1 VOLTAGE ^A	-33 TO -77	VOLTS
DC ION TRAP CURRENT STANDARD COIL #111 (APPROX.)	85	MA.

^A VISUAL EXTINCTION OF UNDEFLECTED FOCUSED SPOT.

→ INDICATES A CHANGE.

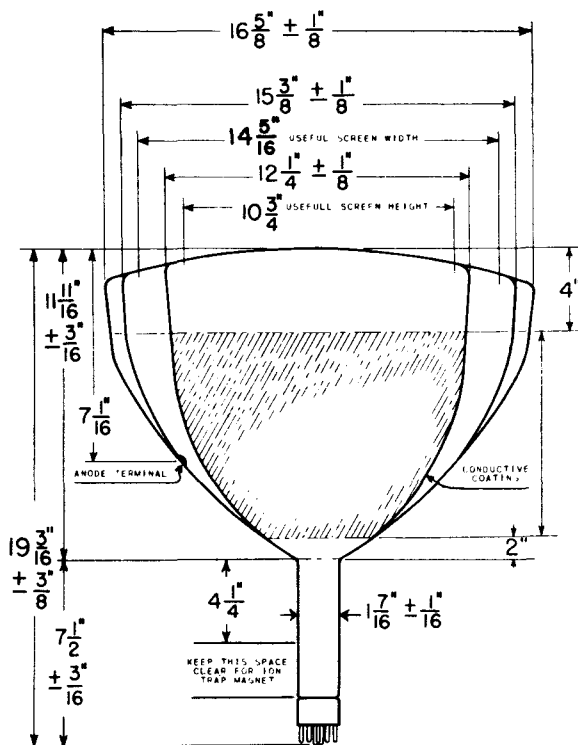
CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

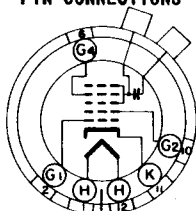
MECHANICAL DATA

OVERALL LENGTH	19 $\frac{3}{16}$ $\pm$ $\frac{3}{8}$	INCHES
GREATEST DIMENSIONS OF BULB		
DIAGONAL	16 $\frac{5}{8}$ $\pm$ $\frac{1}{8}$	INCHES
WIDTH	15 $\frac{3}{8}$ $\pm$ $\frac{1}{8}$	INCHES
HEIGHT	12 $\frac{1}{4}$ $\pm$ $\frac{1}{8}$	INCHES
MINIMUM USEFUL SCREEN DIMENSIONS		
WIDTH	14 $\frac{5}{16}$ $\leftarrow$	INCHES
HEIGHT	10 $\frac{3}{4}$	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 $\pm$ 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



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

BOTTOM VIEW