TUNG-SOL

CATHODE RAY

THE 17BMP4 IS A DIRECT VIEW PICTURE TUBE DESIGNED FOR TELEVISION APPLICATIONS. ITS FEATURES INCLUDE:

ELECTROSTATIC FOCUS	**ALUMINIZED SCREEN**
MAGNETIC DEFLECTION	**GRAY FILTER FACEPLATE**
UNIPOTENTIAL CATHODE	**19 1/8" X 15" RASTER SIZE**
EXTERNAL CONDUCTIVE COATING	**EXTERNAL SINGLE FIELD ION TRAP**
	14 5/16" X 11 1/8" RASTER SIZE

ELECTRICAL DATA

FOCUSING METHOD	ELECTROSTATIC	
DEFLECTING METHOD	MAGNETIC	
DEFLECTION ANGLE (APPROX.):		
HORIZONTAL	80	DEGREES
VERTICAL	65	DEGREES
DIAGONAL	90	DEGREES
DIRECT INTERELECTRODE CAPACITANCES (APPROX.):		
CATHODE TO ALL OTHER ELECTRODES	5	μμf
GRID #1 TO ALL OTHER ELECTRODES	6	μμf
MAXIMUM EXTERNAL CONDUCTIVE COATING TO ANODE	1500	μμf
MINIMUM EXTERNAL CONDUCTIVE COATING TO ANODE	750	μμf

OPTICAL DATA

PHOSPHOR NUMBER	SULFIDE TYPE	P-4
FLUORESCENT COLOR		WHITE
PHOSPHORESCENT COLOR		WHITE
PERSISTENCE		SHORT
FACEPLATE TRANSMISSION AT CENTER (APPROX.):	71	PERCENT

RATINGS

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

HEATER VOLTAGE	6.3	VOLTS
HEATER CURRENT	0.6	AMP.
MAXIMUM DC ANODE VOLTAGE*	18 000	VOLTS
MAXIMUM DC GRID #4 VOLTAGE	-500 TO +1000	VOLTS
MAXIMUM DC GRID #2 VOLTAGE	200	VOLTS
MAXIMUM GRID #1 VOLTAGE:		
DC NEGATIVE-BIAS VALUE	125	VOLTS
DC POSITIVE-BIAS VALUE	0	VOLTS
POSITIVE-PEAK VALUE	0	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[A]

DC ANODE VOLTAGE	14 000	VOLTS
DC GRID #4 VOLTAGE	-55 TO +300	VOLTS
DC GRID #2 VOLTAGE	110	VOLTS
DC GRID #1 VOLTAGE	-32 TO -50	VOLTS
DC ION TRAP MAGNET RATED STRENGTH	37	GAUSSES

*BRILLIANCE AND DEFINITION DECREASE WITH DECREASING ANODE VOLTAGE. IN GENERAL, ANODE VOLTAGE SHOULD NOT BE LESS THAN 12,000 VOLTS.

[A]THIS TUBE MAY BE OPERATED IN GRID DRIVE IF DESIRED, WITH SOME LOSS IN EFFICIENCY. AVERAGE RASTER CUTOFF, USING GRID DRIVE, MAY BE CALCULATED: $E_{g1co} = -.502\ E_{g2} + 5.8$

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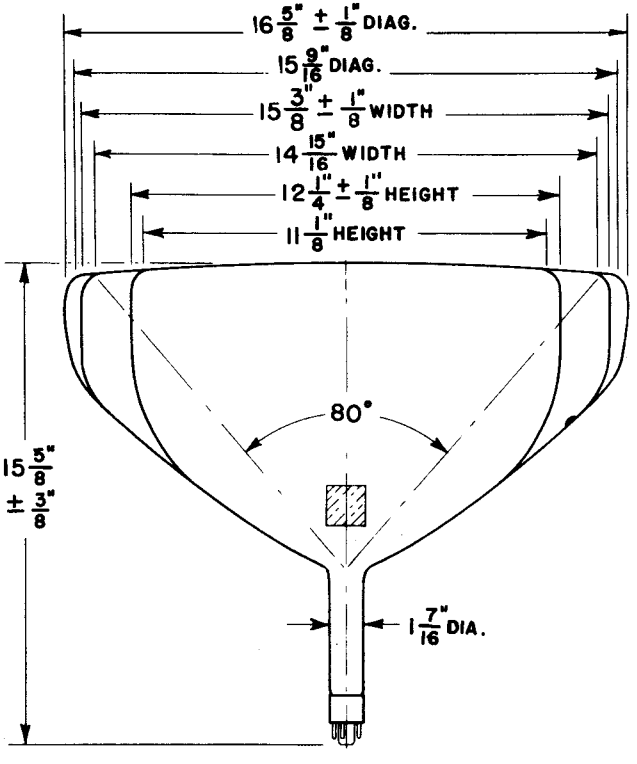
MECHANICAL DATA

OVERALL LENGTH	15 5/8 ± 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
MIN. USEFUL SCREEN DIMENSIONS:		
DIAGONAL	15 9/16	INCHES
WIDTH	14 15/16	INCHES
HEIGHT	11 1/8	INCHES
BULB CONTACT	RECESSED SMALL CAVITY CAP	J1-21
BASE	SMALL SHELL DUODECAL 6 PIN	B6-63
BASING		12L

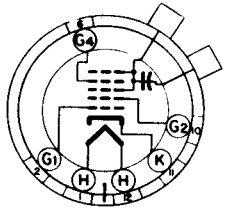
BULB CONTACT ALIGNMENT

J1-21 CONTACT ALIGNS WITH PIN POSITION #6 ± 30 DEGREES



PIN 1 – HEATER
PIN 2 – GRID #1
PIN 6 – GRID #4
PIN 10 – GRID #2
PIN 11 – CATHODE

PIN CONNECTIONS



BOTTOM VIEW

PIN 12 – HEATER
ANODE CAP:
GRID NO. 3
GRID NO. 5