

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	μf
GRID #1 TO ALL OTHER ELECTRODES	6	μf
MAXIMUM EXTERNAL CONDUCTIVE COATING TO ANODE	1500	μf
MINIMUM EXTERNAL CONDUCTIVE COATING TO ANODE	750	μf

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	MEG OHMS

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	1 37	GAUSSSES

* 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: $E_{910} = .502 E_{92}^{2.5.8}$

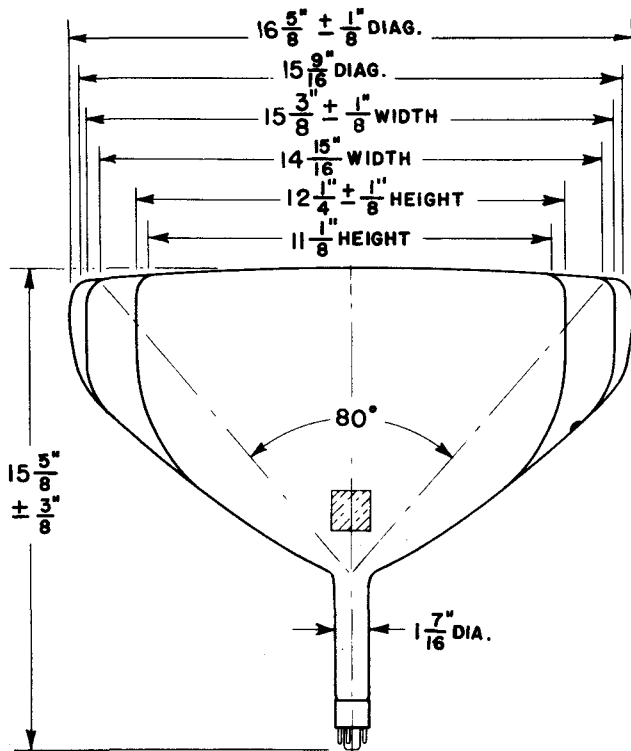
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TUNG-SOL

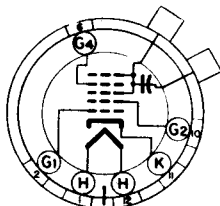
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MECHANICAL DATA

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		INCHES
WIDTH	15 9/16	INCHES
HEIGHT	14 15/16	INCHES
BULB CONTACT	11 1/8	INCHES
BASE	RECESSED SMALL CAVITY CAP	J4-24
BASING	SMALL SHELL DUODECAL 6 PIN	B6-63
BULB CONTACT ALIGNMENT		12L
J4-24 CONTACT ALIGNS WITH PIN POSITION #6 ± 30 DEGREES		



PIN CONNECTIONS



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

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

BOTTOM VIEW