

TUNG-SOL

CATHODE RAY

THE 17AVP4 AND 17AVP4A ARE DIRECT VIEW PICTURE TUBES DESIGNED FOR TELEVISION APPLICATIONS. THEY ARE IDENTICAL *EXCEPT* FOR THE ALUMINIZED SCREEN ON THE 17AVP4A. THEIR COMMON FEATURES INCLUDE:

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

ELECTRICAL DATA

	LOW VOLTAGE ELECTROSTATIC	MAGNETIC
FOCUSING METHOD		
DEFLECTING METHOD		
DEFLECTION ANGLE (APPROX.):		
HORIZONTAL	85	DEGREES
VERTICAL	68	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	1 500	μf
MINIMUM EXTERNAL CONDUCTIVE COATING TO ANODE	750	μf

OPTICAL DATA

PHOSPHOR NUMBER	P-4
FLUORESCENT COLOR	WHITE
PHOSPHORESCENT COLOR	WHITE
PERSISTENCE	SHORT

RATINGS

DESIGN CENTER VALUES

HEATER VOLTAGE	6.3	VOLTS
HEATER CURRENT	0.6	AMP.
MAXIMUM DC COLLECTOR, GRID #3, GRID #5 VOLTAGE	16 000	VOLTS
MAXIMUM DC GRID #4 VOLTAGE ^A	-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
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	MEG OHMS

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

DC COLLECTOR, GRID #3, GRID #5 VOLTAGE	12 000	VOLTS
DC GRID #4 VOLTAGE (FOCUSING ELECTRODE) ^B	-48 TO +264	VOLTS
DC GRID #2 VOLTAGE	300	VOLTS
DC GRID #1 VOLTAGE ^C	-33 TO -77	VOLTS
DC GRID #2 CURRENT	-15 TO +15	$\mu\text{AMP.}$
DC FOCUSING COIL CURRENT (APPROX.)	-25 TO +25	$\mu\text{AMP.}$
ION TRAP CURRENT STANDARD COIL #117 (APPROX.)	30	MA.

^A THE FOCUS ELECTRODE MAY BE MODULATED TO IMPROVE OVERALL FOCUS.

^B WITH THE COMBINED GRID #1 VOLTAGE AND VIDEO-SIGNAL VOLTAGE ADJUSTED TO GIVE A COLLECTOR CURRENT OF 100 MICROAMPERES ON A 10 3/4" X 14 1/4" PICTURE AREA.

^C VISUAL EXTINCTION OF UNDEFLECTED FOCUSED SPOT.

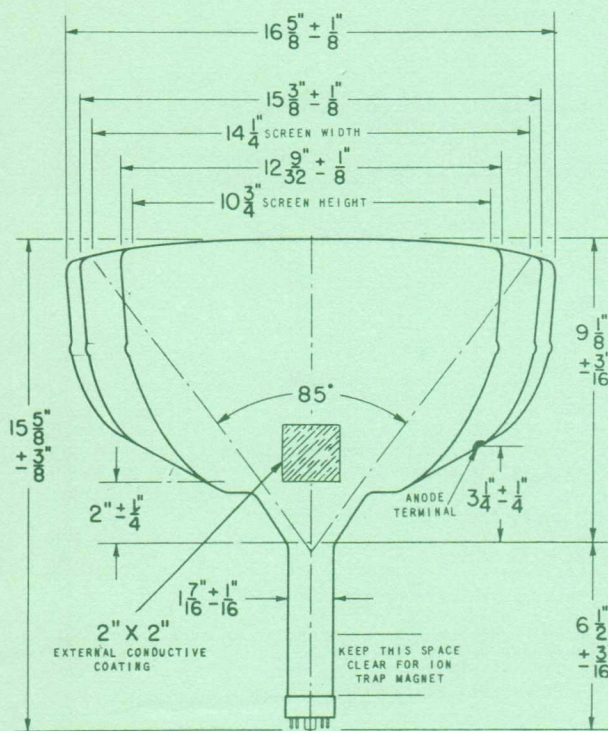
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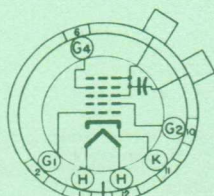
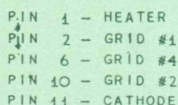
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MECHANICAL DATA

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 9/32 ± 1/8	INCHES
MINIMUM USEFUL SCREEN DIMENSIONS:		
WIDTH	14 1/4	INCHES
HEIGHT	10 3/4	INCHES
BULB CONTACT	RECESSED SMALL CAVITY CAP	J4-24
BASE	SMALL SHELL DUODECAL 6 PIN	B6-63
BASING		42L



PIN CONNECTIONS



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

BOTTOM VIEW

SOCKET FOR THIS BASE SHOULD NOT BE RIGIDLY MOUNTED; IT SHOULD HAVE FLEXIBLE LEADS AND BE ALLOWED TO MOVE FREELY.