

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

FOCUSING METHOD	LOW VOLTAGE ELECTROSTATIC	
DEFLECTING METHOD	MAGNETIC	
DEFLECTION ANGLE (APPROX.):		
HORIZONTAL	85	DEGREES
VERTICAL	68	DEGREES
DIAGONAL	90	DEGREES
DIRECT INTERELECTRODE CAPACITANCES (APPROX.):		
CATHODE TO ALL OTHER ELECTRODES	5	mmf
GRID #1 TO ALL OTHER ELECTRODES	6	mmf
MAXIMUM EXTERNAL CONDUCTIVE COATING TO ANODE	1 500	mmf
MINIMUM EXTERNAL CONDUCTIVE COATING TO ANODE	750	mmf

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	MEGOHMS

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	μAMP.
DC FOCUSING COIL CURRENT (APPROX.)	-25 TO +25	μAMP.
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.

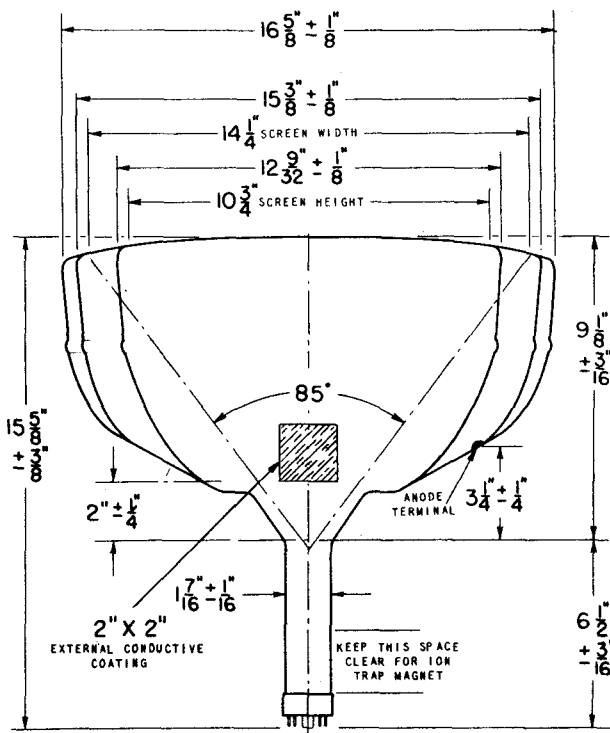
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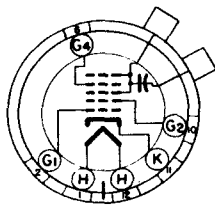
MECHANICAL DATA

OVERALL LENGTH	$15 \frac{5}{8} \pm \frac{3}{8}$	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	$12 \frac{9}{32} \pm \frac{1}{8}$	INCHES
MINIMUM USEFUL SCREEN DIMENSIONS:		
WIDTH	$14 \frac{1}{4}$	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



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 #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.