

TUNG-SOL**CATHODE RAY**

THE 24YP4 IS A DIRECT-VIEW PICTURE TUBE DESIGNED FOR USE IN TELEVISION APPLICATIONS. ITS FEATURES INCLUDE:

SPHERICAL FACEPLATE	ALUMINIZED SCREEN
UNIPOTENTIAL CATHODE	MAGNETIC DEFLECTION
EXTERNAL CONDUCTIVE COATING	GREY FILTER FACEPLATE
RECTANGULAR GLASS CONSTRUCTION	16 7/8" X 21 7/8" RASTER SIZE
LOW VOLTAGE ELECTROSTATIC FOCUS	EXTERNAL SINGLE FIELD ION TRAP

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	mmf
GRID #1 TO ALL OTHER ELECTRODES	6	mmf
MAXIMUM EXTERNAL CONDUCTIVE COATING TO ANODE	1 500	mmf
MINIMUM EXTERNAL CONDUCTIVE COATING TO ANODE	1 200	mmf

OPTICAL DATA

PHOSPHOR NUMBER	P-4
FLUORESCENT COLOR	WHITE
PHOSPHORESCENT COLOR	WHITE
PERSISTENCE	MEDIUM
FACEPLATE TRANSMISSION AT CENTER (APPROX.)	73 PERCENT

RATINGS

DESIGN CENTER VALUES

HEATER VOLTAGE	6.3	VOLTS
HEATER CURRENT	0.6	AMP.
MAXIMUM DC ANODE, GRID #3 VOLTAGE	20 000	VOLTS
MAXIMUM DC GRID #4 VOLTAGE	~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: ^A		
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 ANODE, GRID #3 VOLTAGE	18 000	VOLTS
DC GRID #4 VOLTAGE	-72 TO +400	VOLTS
DC GRID #2 VOLTAGE	300	VOLTS
DC GRID #1 VOLTAGE ^B	-33 TO -77	VOLTS
DC ION TRAP MAGNET STANDARD COIL #111 (APPROX.)	100 ± 50%	MA.

^A CATHODE SHOULD BE RETURNED TO ONE SIDE OR TO THE MID-TAP OF THE HEATER TRANSFORMER WINDING.

^B VISUAL EXTINCTION OF UNDEFLECTED FOCUSED SPOT.

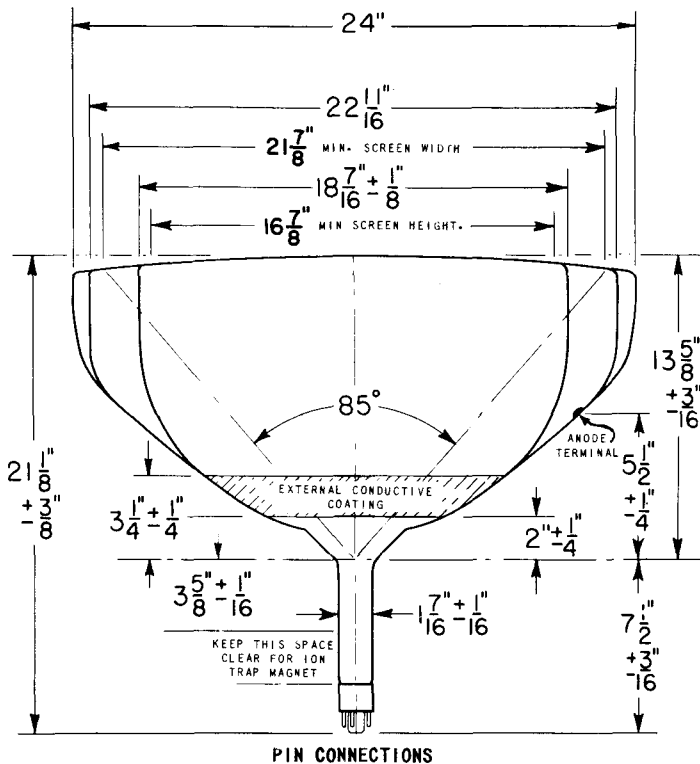
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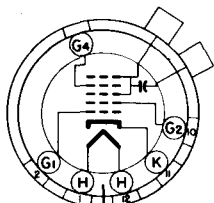
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MECHANICAL DATA

OVERALL LENGTH	21 1/8 ± 3/8	INCHES
GREATEST DIMENSIONS OF BULB:		
DIAGONAL	24	INCHES
WIDTH	22 11/16	INCHES
HEIGHT	18 7/16 ± 1/8	INCHES
MINIMUM USEFUL SCREEN DIMENSIONS:		
WIDTH	21 7/8	INCHES
HEIGHT	16 7/8	INCHES
BULB CONTACT	RECESSED SMALL CAVITY CAP	J4-21
BASE	SMALL SHELL DUODECAL 6 PIN	86-63
BASING		42L
BULB CONTACT ALIGNMENT		
J4-21 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 #3

BOTTOM VIEW