SYLVANIA engineering data service

SYLVANIA
5AUP24
5AUP-*

CHARACTERISTICS

GENERAL DATA

Focusing Method	Electrostatic
Deflection Method	Magnetic
Deflection Angles (Approx.)	40°
Prosphor	Aluminized P-24
Fluorescence	Green
Phosphorescence	Green
Persistence	Short
Faceplate	Clear, Flat

*In addition to the type shown, the 5AUP– can be supplied with several other screen phosphors.

ELECTRICAL DATA

Heater Voltage	6.3	Volts
Heater Current	0.6 ± 10%	Amperes
Direct Interelectrode Capacitances (Approx.)		
Cathode to All Other Electrodes	5	μμfd
Grid No. 1 to All Other Electrodes	8	μμfd
Ion Trap	No Ion Trap Required	

MECHANICAL DATA

Minimum Useful Screen Dimensions (Maximum Assured)	4¼	Inches
Overall Length	12½ ± ⅜	Inches
Bulb Contact (Recessed Small Cavity Cap)	J1-21	
Base (Small Shell Duo Decal 7 Pin)	B7-51	
Basing	12C	
Bulb	J40L	
External Conductive Neck Coating to Anode[1]	500 μμf	Max.
	100 μμf	Min.
Weight (Approx.)	1.4	Pounds

RATINGS

MAXIMUM RATINGS (Absolute Maximum Values)

Maximum Anode Voltage	30,000	Volts	dc
Minimum Anode Voltage	20,000	Volts	dc
Grid No. 3 Voltage (Focusing Electrode)	6600	Volts	dc
Grid No. 2 Voltage	385	Volts	dc
Grid No. 1 Voltage			
Negative Bias Value	155	Volts	dc
Negative Peak Value	220	Volts	
Positive Bias Value	0	Volts	dc
Positive Peak Value	2	Volts	
Peak Heater-Cathode Voltage			
Heater Negative with Respect to Cathode During Warm-up Period not to Exceed 15 Seconds	450	Volts	
After Equipment Warm-up Period	165	Volts	
Heater Positive with Respect to Cathode	165	Volts	

TYPICAL OPERATING CONDITIONS

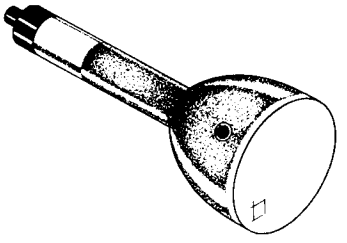
Anode Voltage	27,000 Volts	dc
Grid No. 3 Voltage for Focus (Ib = 200 μa)	4600 to 5800 Volts	dc
Grid No. 2 Voltage	200 Volts	dc
Grid No. 1 Voltage for Spot Cutoff[2]	−40 to −100 Volts	dc

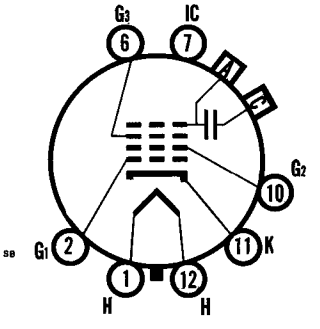
CIRCUIT VALUES

Grid No. 1 Circuit Resistance	1.5 Megohms Max.

QUICK REFERENCE DATA

Color Flying Spot Scanner Tube
5" Round Glass Type
Flat Faceplate
Clear Faceplate
Magnetic Deflection
Electrostatic Focus
No Ion Trap
Aluminized Screen





12-C

SYLVANIA
ELECTRONIC TUBES
A Division of
Sylvania Electric Products Inc.
PICTURE TUBE OPERATIONS
SENECA FALLS, NEW YORK

Prepared and Released By The
TECHNICAL PUBLICATIONS SECTION
EMPORIUM, PENNSYLVANIA
OCTOBER, 1961

File Under
SPECIAL AND GENERAL PURPOSE
CATHODE RAY TUBES

NOTE:

1. External conductive neck coating must be grounded.

WARNING:

X-ray radiation shielding may be necessary to protect against possible danger of personal injury from prolonged exposure at close range if this tube is operated at higher than the manufacturer's Maximum Rated Anode Voltage or 16,000 volts, whichever is less.

OUTLINE

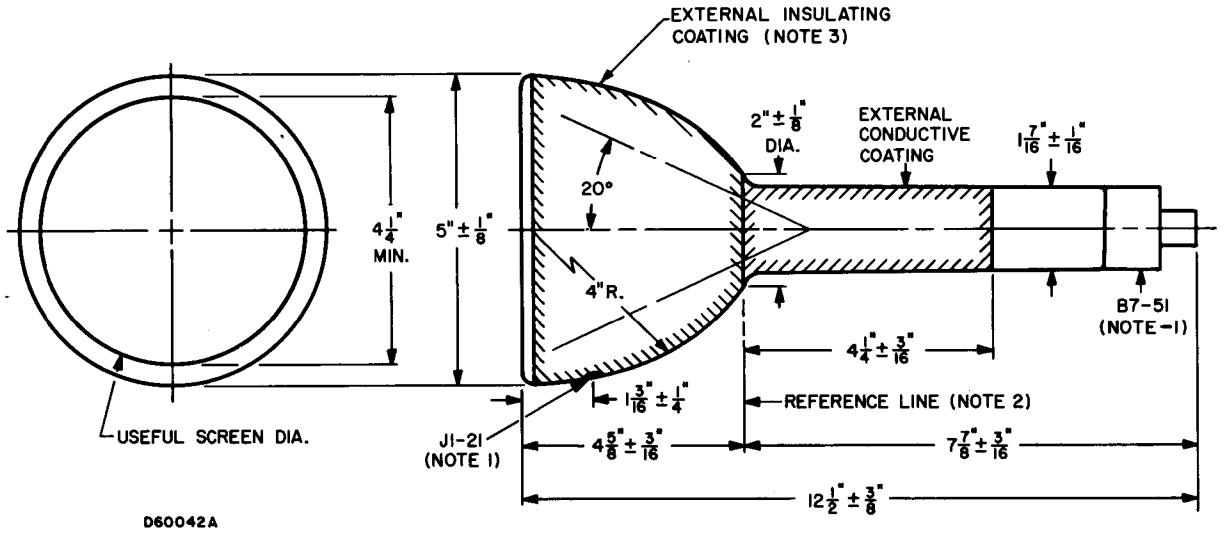


DIAGRAM NOTES:

1. *The plane through the tube axis and vacant pin position No. 3 may vary from the plane through the tube axis and anode terminal by an angular tolerance (measured about the tube axis) of ± 10°. Anode terminal is on the same side as vacant pin position No. 3.*
2. *With tube neck inserted through flared end of reference line gauge (JEDEC No. 110) and with the tube seated in the gauge, the reference line is determined by intersection of plane CC' of the gauge with the glass funnel.*
3. *The 5AUP– should be handled by the neck only. Fingerprints or dust on the insulating coating on the bulb may cause electrical breakdown during humid weather.*