CHARACTERISTICS

GENERAL DATA

Focusing Method	Magnetic
Deflecting Method	Magnetic
Deflection Angles (Approx.)	53 Degrees

Types*	Fluorescence	Persistence
5DKP4	White	Medium Short
5DKP11	Blue	Medium Short
5DKP15	Green	Visible: Short U.V.: Very Short
5DKP16	Bluish Purple (U.V.)	Very Short
5DKP24	Green	Short

*In addition to the types shown, the 5DKP- can be supplied with several other screen phosphors. All screens are aluminized.

ELECTRICAL DATA

Heater Voltage	6.3 Volts
Heater Current	0.6 ± 10 % Ampere
Direct Interelectrode Capacitances (Approx.)	
Cathode to All Other Electrodes	5 μμf
Grid No. 1 to All Other Electrodes	8 μμf

MECHANICAL DATA

Minimum Useful Screen Diameter	4¼ Inches
Nominal Overall Length	11⅛ Inches
Bulb Contact (Recessed Small Ball Cap)	J1-22
Base (Medium Shell Octal 5-pin or 8-pin)	B8-11, B8-65 or B5-80
Basing	5AN
Bulb	J39½L

RATINGS

MAXIMUM RATINGS (Absolute Maximum Values)

Anode Voltage[1]	8800 Volts	dc
Grid No. 2 Voltage	770 Volts	dc
Grid No. 1 Voltage		
Negative Bias Value	180 Volts	dc
Positive Bias Value	0 Volts	dc
Positive Peak Value	2 Volts	
Peak Heater-Cathode Voltage		
Heater Negative with Respect to Cathode	180 Volts	
Heater Positive with Respect to Cathode	180 Volts	

TYPICAL OPERATING CONDITIONS

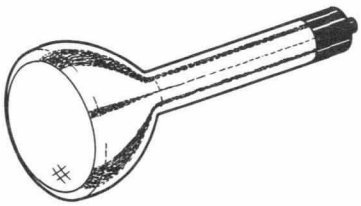
Anode Voltage[2]	8000 Volts	dc
Grid No. 2 Voltage	250 Volts	dc
Grid No. 1 Voltage[3]	−30 to −75 Volts	dc
Focusing Coil Current[4]	136 ± 15 % Ma	dc
Spot Position (Undeflected)[5]	9 mm	
Line Width A[6]	.16 mm	Max.

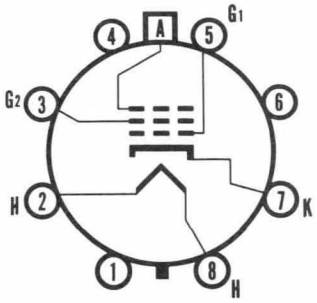
CIRCUIT VALUES

Grid No. 1 Circuit Resistance	1.5 Megohms Max.

QUICK REFERENCE DATA

5DKP4 —Monitor Tube
5DKP11 —Photo Recorder
5DKP15, 5DKP16, 5DKP24 —Flying Spot Scanners
5″ Round Glass Type
Aluminized Screen
Magnetic Deflection
Magnetic Focus
High Resolution





5-AN

SYLVANIA
ELECTRONIC TUBES
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PURPOSE CATHODE RAY TUBES

NOTES:

1. *The product of the anode voltage and the average anode current should be limited to 6 watts.*
2. *Brilliance and definition decrease with decreasing anode voltage. In general, the anode voltage should not be less than 6000 volts.*
3. *Visual extinction of undeflected focused spot.*
4. *For JEDEC focus coil No. 106 or equivalent, with the Grid No. 1 voltage adjusted to produce an accelerator current of 200 μamps and with distance from reference line to center of air gap equal to 2¾ inches.*
5. *The center of the undeflected unfocused spot will fall within a circle of 9 mm radius centered on the tube face.*
6. *Measured in accordance with MIL-E-1 specification, at anode current of 200 μa.*

OUTLINE

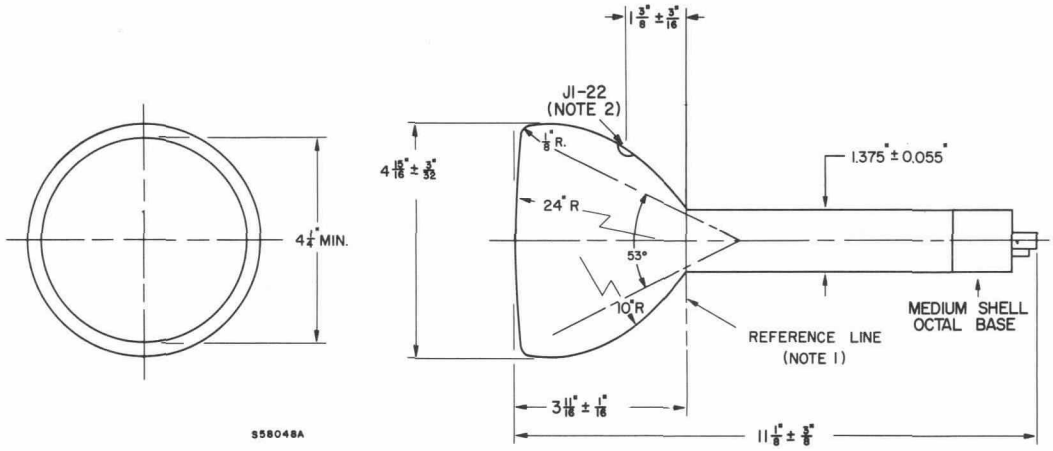

DIAGRAM NOTES:

1. *Reference line is determined by position where JEDEC Gauge No. 124 (a cylinder 1.430″ + .003″ − .000″ ID and 2″ long) will seat against cone of bulb.*
2. *The plane through the tube axis and Pin No. 5 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 same side of tube as Pin No. 5.*