

CHARACTERISTICS

GENERAL DATA

Focusing Method		Magnetic
Deflection Method		Magnetic
Deflection Angle (Approx.)		50 Degrees
Types*	12DP7A	12DP7C
Fluorescence	Blue-White	Blue-White
Phosphorescence	Yellow	Yellow
Persistence	Long	Long
Faceplate	Clear or Gray	Gray
Light Transmittance (approx.)		
Gray Faceplate	75	75
Screen	—	Aluminized
		Percent

*In addition to the types shown, the 12DP- can be supplied with several other screen phosphors.

ELECTRICAL DATA

Heater Voltage	6.3 Volts
Heater Current	$0.6 \pm 10\%$ Ampere
Direct Interelectrode Capacitances (approx.)	
Cathode to All Other Electrodes	5 $\mu\mu f$
Grid No. 1 to All Other Electrodes	8 $\mu\mu f$

MECHANICAL DATA

Minimum Useful Screen Diameter	10 Inches
Bulb	J96S or Equivalent
Bulb Contact (Medium Cap)	C1-5
Base	
12DP7A (Long Medium Shell Octal	
5 or 8-Pin	B5-80 or B8-65
12DP7C (Long Medium Shell 8-Pin)	B8-65
Basing	5AN
Bulb Contact Alignment	
Anode Contact Aligns with Pin No. 5	±10 Degrees
Weight (Approx.)	8½ Pounds

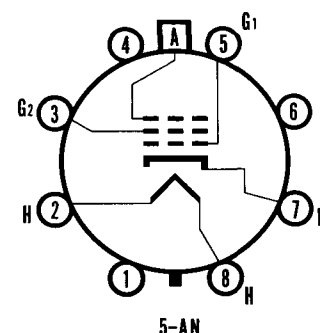
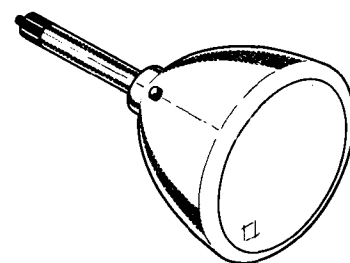
RATINGS

MAXIMUM RATINGS (Absolute Maximum Values)

		12DP7A	12DP7C
Anode Voltage	11,000	13,200 Volts	dc
Grid No. 2 Voltage	770	770 Volts	dc
Grid No. 1 Voltage			
Negative Bias Value	200	200 Volts	dc
Positive Bias Value	0	0 Volts	dc
Positive Peak Value	2	2 Volts	
Peak Heater-Cathode Voltage			
Heater Negative with Respect to Cathode	140	200 Volts	
Heater Positive with Respect to Cathode	140	200 Volts	

QUICK REFERENCE DATA

12" Direct Viewed
Round Glass Type
Magnetic Deflection
Magnetic Focus
Gray Filter Glass Faceplate
Spherical Faceplate
12DP7C — Aluminized



**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

MARCH, 1960

PAGE 1 OF 3

File Under

SPECIAL AND GENERAL PURPOSE CATHODE RAY TUBES

SYLVANIA

12DP7A*

12DP7C

PAGE 2

TYPICAL OPERATING CONDITIONS

Anode Voltage ¹		4,000 Volts	dc
Grid No. 2 Voltage		250 Volts	dc
Grid No. 1 Voltage Required			
for Cutoff ²		-25 to -70 Volts	dc
Focusing Coil Current (approx.) ³		75 to 102 Ma	dc
Line Width A, (12DP7C) ⁴		0.50 mm	Max.

CIRCUIT VALUES

Grid No. 1 Resistance		1.5 Megohms Max.
-----------------------	-----------	------------------

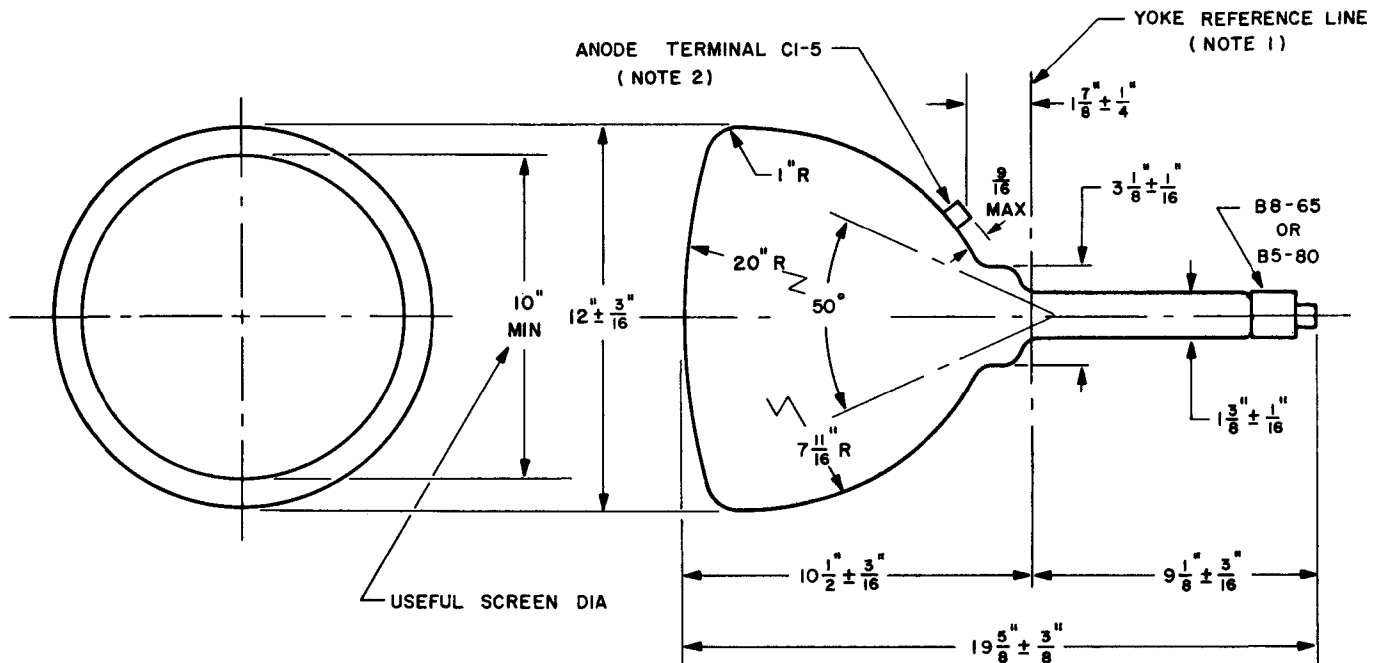
NOTES:

1. Brilliance and definition decrease with decreasing anode voltage. In general, the anode voltage should not be less than 4,000 volts.
2. Visual extinction of undeflected focused spot.
3. For JEDEC focusing coil No. 106 or equivalent with distance from the yoke reference line to center of air gap equal to 4 1/8 inches.
4. Measured in accordance with MIL-E-1, at an anode current of 200 μ a.

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



358063

DIAGRAM NOTES:

1. Reference line is determined by the plane of the upper edge of the reference line gauge (JEDEC No. 112) when the gauge is resting on the cone.
2. Anode Terminal aligns with Pin No. 5 $\pm$ 10 degrees and is on same side as Pin No. 5.