SYLVANIA

engineering data service

SYLVANIA
12DP7A*
12DP7C

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	Percent
Screen	—	Aluminized	

*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 ± 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	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

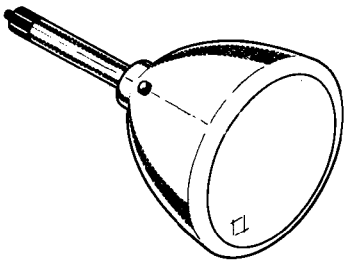
RATINGS

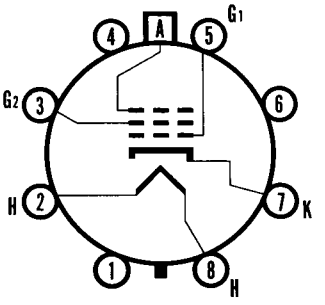
MAXIMUM RATINGS (Absolute Maximum Values)

	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





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SYLVANIA
ELECTRONIC TUBES

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SPECIAL AND GENERAL PURPOSE
CATHODE RAY TUBES

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 4⅛ inches.*
4. *Measured in accordance with MIL-E-1, at an anode current of 200 μa.*

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

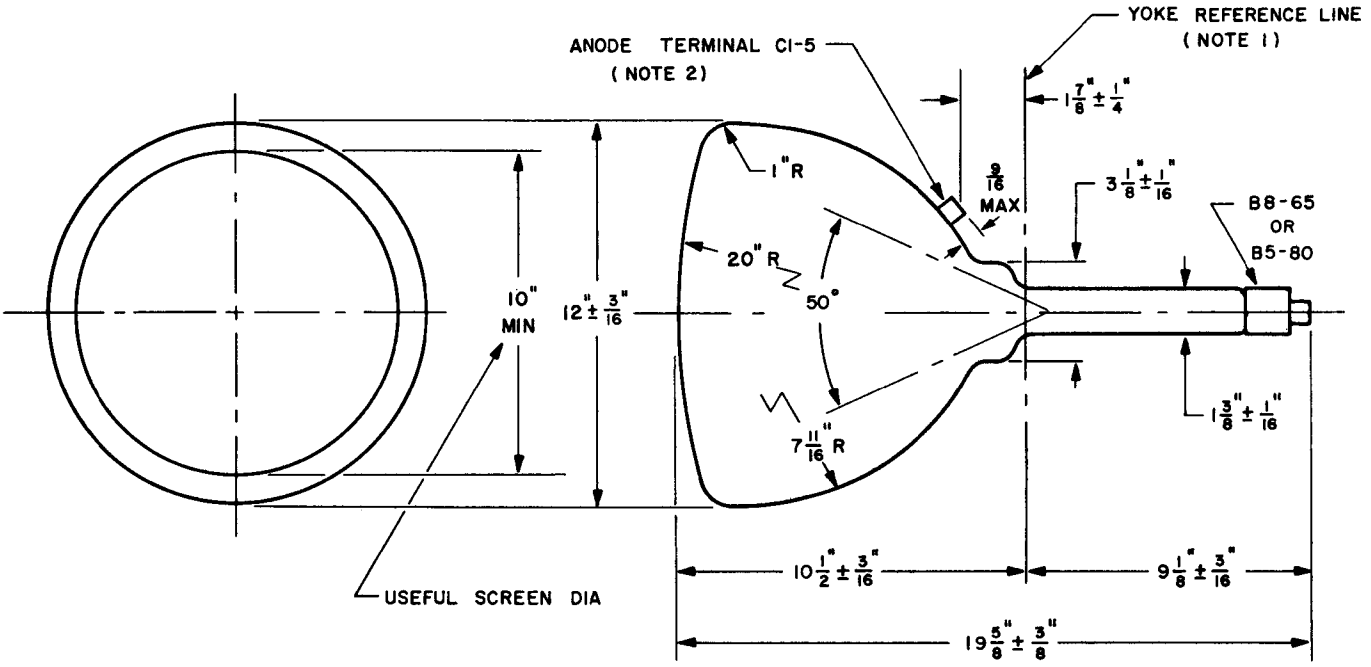

DIAGRAM NOTES:

1. *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 ± 10 degrees and is on same side as Pin No. 5.*