

engineering data service

SYLVANIA 12DP7A* 12DP7C

CHARACTERISTICS

GENERAL DATA			
Focusing Method		Magnetic	
Deflection Method			
Deflection Angle (Approx.)			Degrees
Types*	12 DP 7 A	12 DP 7 C	
Fluorescence	Blue-White	Blue-White	
Phosphorescence	Yellow	Yellow	
Persistence	Long	Long	
Faceplate	Clear or Gray	Gray	
Light Transmittance (approx	i.)		
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			$0.6 \pm 10\%$ Ampere
Direct Interelectrode Capacitances (approx.))		_
Cathode to All Other Electrodes			5 μμ f
Grid No. 1 to All Other Electrodes .			8 μμf

MECHANICAL DATA

Minimum Useful Screen Diameter
12DP7A (Long Medium Shell Octal
5 or 8-Pin
12DP7C (Long Medium Shell 8-Pin)
Basing
Bulb Contact Alignment
Anode Contact Aligns with Pin No. 5 ±10 Degrees
Weight (Approx.)

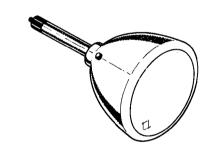
RATINGS

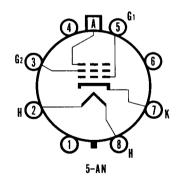
MAXIMUM RATINGS (Absolute Maximum Values)

								12 DP 7 A	12 DP 7 C	
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 Volt	age									
Heater Negative with	R	esp	ect	to	Cat	ho	de	140	200 Volts	
Heater Positive with	Re	spe	ct	to	Cat	ho	de	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

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File Under

SPECIAL AND GENERAL PURPOSE CATHODE RAY TUBES

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TYPICAL OPERATING CONDITIONS

Anode Voltage ¹							٠				4,000 Volts	dc
Grid No. 2 Voltage											250 Volts	dc
Grid No. 1 Voltage Required												
for Cutoff ²				٠							−25 to −70 Volts	dc
Focusing Coil Current (approx.)3									٠		75 to 102 Ma	dc
Line Width A, (12DP7C) 4											0.50 mm	Max

CIRCUIT VALUES

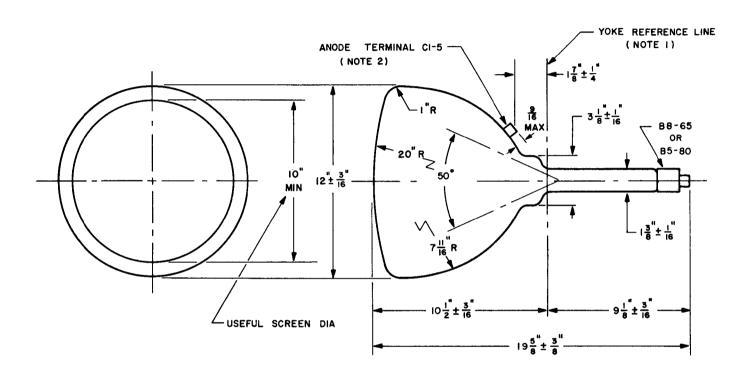
NOTES:

- 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 41/8 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



S 58063

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.