Electronics Department

G E N E R A L E L E C T R I C

The 10DP4 is a ten-inch cathode-ray picture tube with a direct-view screen and semi-flat face for television receiving application. Features of this tube are electrostatic focus requiring no appreciable focus current, and a metal-backed screen to prevent screen burning by ions and to increase screen brightness.

GENERAL CHARACTERISTICS

Electrical		
Heater Voltage	6.3 ± 10%	Volts
Heater Current	0.6 ± 10%	Amperes
Focusing Method - Electrostatic		
Deflecting Method - Magnetic		
Maximum Deflecting Angle	50	Degrees
Phosphor - P4		
Fluorescence - White		
Persistence - Medium		
Direct Interelectrode Capacitances, Nominal		
Cathode to All Other Electrodes	6	uuf
Grid No. 1 to All Other Electrodes	10	uuf
Mechanical		
Overall Length	17 5/8 ± 3/8	Inches
Greatest Diameter of Bulb	10 1/2 ± 1/8	Inches
Minimum Useful Screen Diameter	9	Inches
Bulb Contact JETEC Designation	J1 - 21	
Base JETEC Designation	Small-shell Duodecal 7-Pin	
Basing JETEC Designation	12C	

MAXIMUM RATINGS Design Center Values

Anode No. 2 Voltage	10000 Max	Volts D-C
Anode No. 1 Voltage	3600 Max	Volts D-C
Grid No. 2 Voltage	410 Max	Volts D-C
Grid No. 1 Voltage		
Negative-Bias Value	150 Max	Volts D-C
Positive-Bias Value	0 Max	Volts D-C
Positive-Peak Value	2 Max	Volts
Peak Heater-Cathode Voltage*		
Heater Negative With Respect to Cathode After Equipment Warm-up Period	125 Max	Volts D-C
Heater Positive With Respect to Cathode At Any Time	125 Max	Volts D-C
Heater Negative With Respect to Cathode During Equipment Warm-up Period Not to Exceed 15 Seconds	410 Max	Volts D-C

TYPICAL OPERATING CONDITIONS

Anode No. 2 Voltage	9000	Volts D-C
Anode No. 1 Voltage	2550 to 3250	Volts D-C
Grid No. 2 Voltage	250	Volts D-C
Grid No. 1 Voltage/	36 to 84	Volts D-C
Spot Position (Undeflected)	16 Max	Millimeters

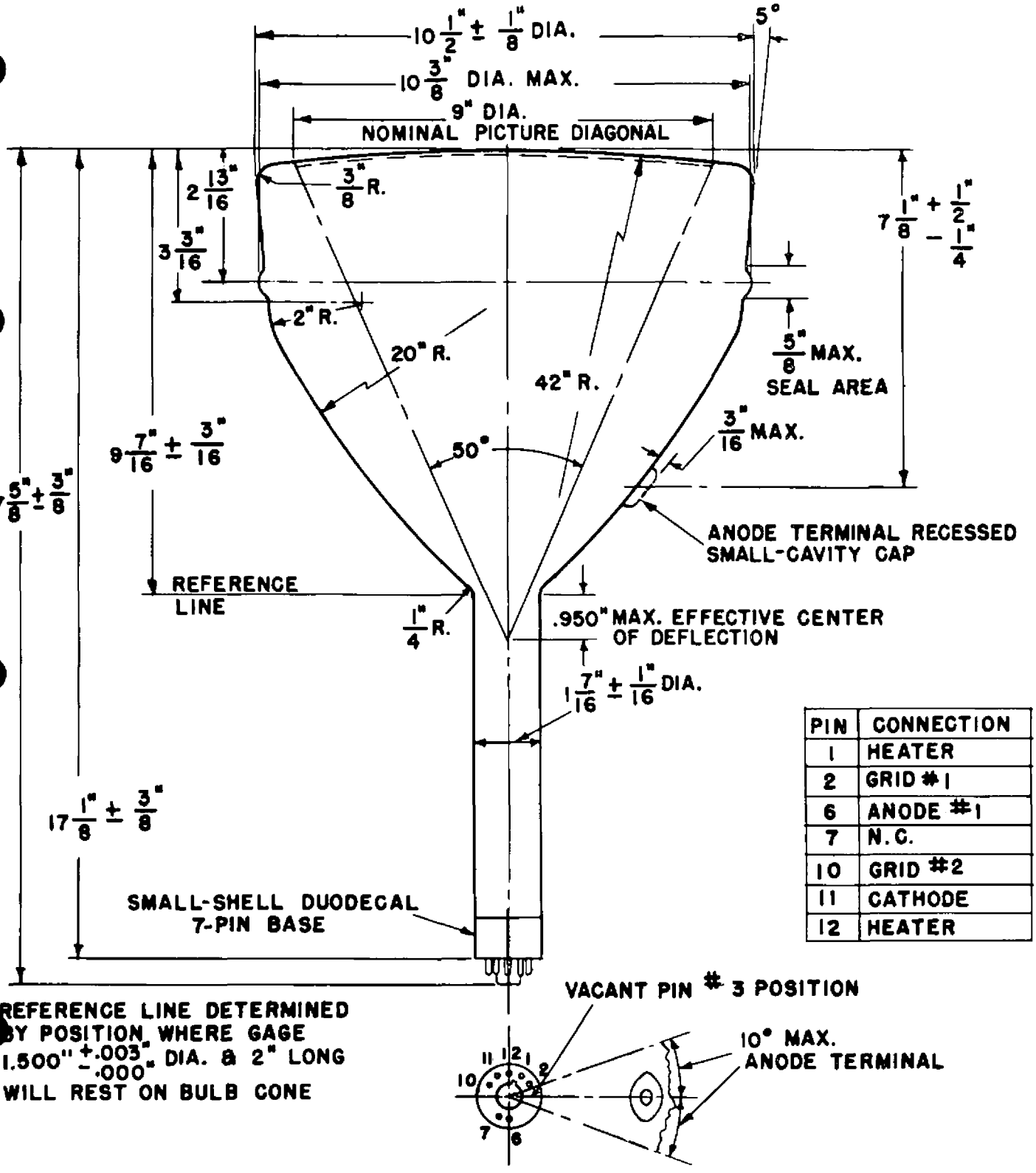
MAXIMUM CIRCUIT VALUES

Grid No. 1 Circuit Resistance	1.5 Max	Megohms

* Cathode should be returned to one side or to the mid-tap of the heater transformer winding.

/ Visual extinction of undeflected focused spot.

N20076AZ



PIN	CONNECTION
1	HEATER
2	GRID #1
6	ANODE #1
7	N.C.
10	GRID #2
11	CATHODE
12	HEATER

REFERENCE LINE DETERMINED BY POSITION WHERE GAGE 1.500" +.003" −.000" DIA. & 2" LONG WILL REST ON BULB CONE

N20076AZ

OUTLINE-CATHODE-RAY TUBE

10DP4

2	W. Zimmerl JK-16724	MADE BY W. SIMPSON March 25, 1946	INSPECTED BY W. J. Walker July 28, 1947
REVISIONS		GENERAL ELECTRIC ELECTRONICS DEPARTMENT TUBE DIVISION	N20076AZ SHEET NO.....CONT. ON SHEET.....

7 45
9'
5'

PRINTS TO

RTD-227-A (12-46) rev.

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