

Electronics Department

GENERAL ELECTRIC

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

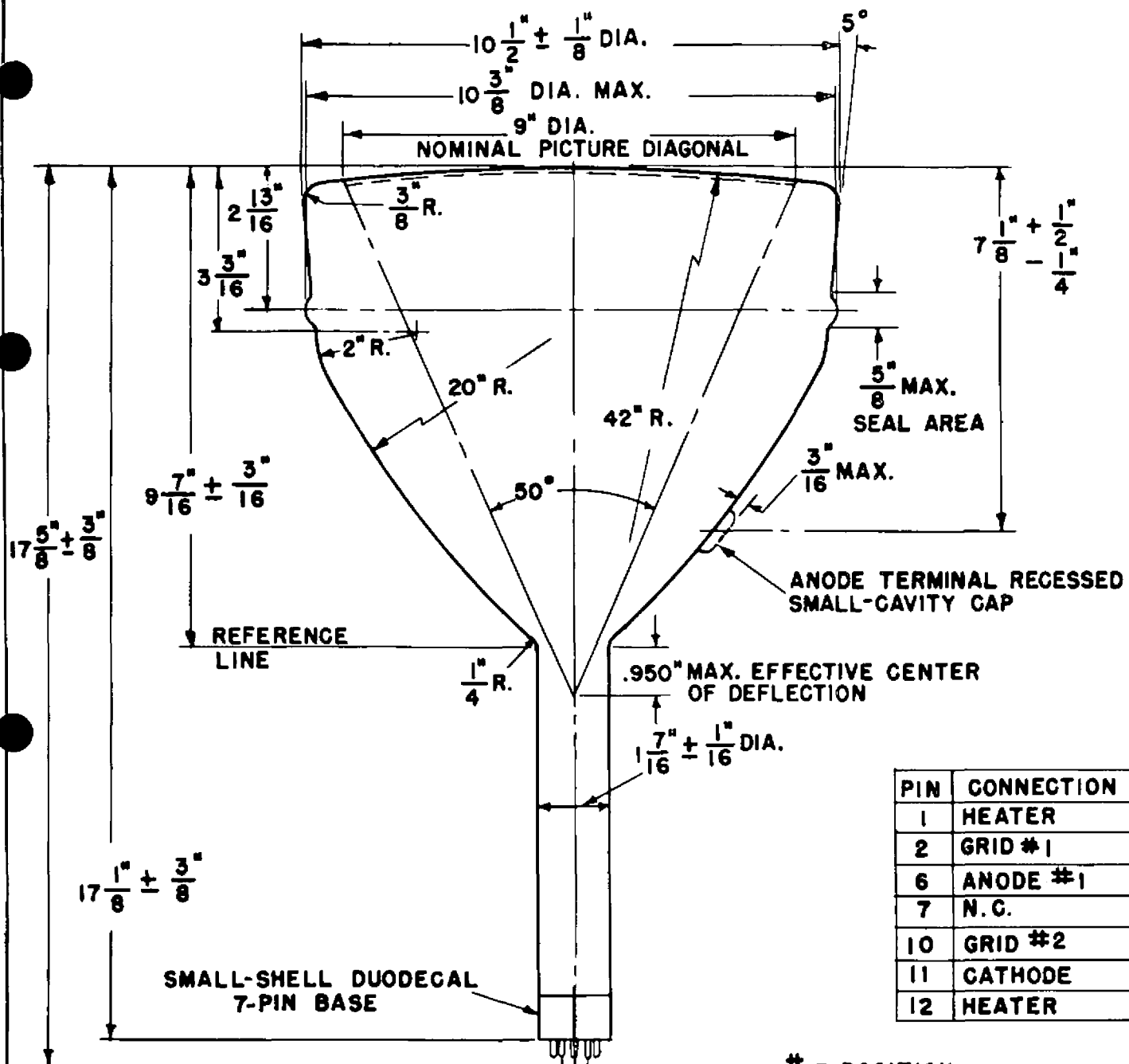
Anode No. 2 Voltage		9000	Volts D-C
Anode No. 1 Voltage	2550 to	3250	Volts D-C
Grid No. 2 Voltage		250	Volts D-C
Grid No. 1 Voltage/	36 to	84	Volts D-C
Spot Position (Undelected)		16 Max	Millimeters

MAXIMUM CIRCUIT VALUES

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

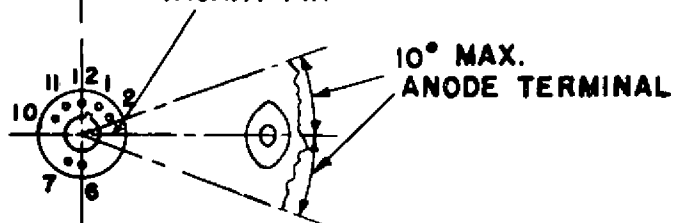
* Cathode should be returned to one side or to the mid-tap of the heater transformer winding.

/ Visual extinction of undelected focused spot.



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

VACANT PIN # 3 POSITION



OUTLINE-CATHODE-RAY TUBE

10DP4

MADE BY <i>W. SIMPSON</i> <i>March 13, 1949</i>		INSPECTED BY <i>W. J. Walker</i> <i>July 28, 1949</i>	
GENERAL ELECTRIC		ELECTRIC	
ELECTRONICS DEPARTMENT		TUBE DIVISION	
REVISIONS		N20076AZ	
2 <i>W. J. Walker</i> <i>July 28, 1949</i>		SHEET No. CONT. ON SHEET	