21DRP4

National Video Corporation
4300 W. 47TH STREET CHICAGO 32, ILLINOIS
CLIFFSIDE 4-5600

The type 21DRP4 is an electrostatic focus and magnetic deflection direct view picture tube. It has an all glass rectangular bulb with a grey filter glass spherical contour faceplate. The lightweight faceplate has a special spherical contour. The screen is aluminized for increased light output and the electron gun is the straight type which does not require an ion trap.

GENERAL CHARACTERISTICS

Focusing Method	Electrostatic	
Deflection Method	Magnetic	
Deflection Angle (Approx.) Horizontal	85	Degrees
Diagonal	90	Degrees
Face Plate Light Transmission (Neutral Density Filter)	74%	Approx.
Phosphor	No. 4	
Fluorescence	White	
Persistence	Short - Medium	
Direct Interelectrode Capacitances (Approx.)		
Cathode to all other electrodes	5	uuf
Grid No. 1 to all other electrodes	6	uuf
External conductive coating to anode	2500	Max. uuf
	2000	Min. uuf

MECHANICAL DATA

Overall Length	18 1/4 ± 3/8	Inches
Greatest Dimensions of Bulb:		
Diagonal	21 3/8 ± 1/8	Inches
Width	20 1/4 ± 1/8	Inches
Height	16 3/8 ± 1/8	Inches
Minimum Useful Screen Dimensions (Max. Assured)		
Screen Area	262	Sq. Inches
Diagonal	20 1/4	Inches
Width	19 1/16	Inches
Height	15 1/16	Inches
Bulb Contact	J1-21	
Base	B6-63	
Basing	12L	
Bulb Contact Alignment		
J1-21 Contact aligns with pin position #6	± 30	Degrees

from JETEC release #2152, March 31, 1958

MAXIMUM RATINGS Design Center Values

Heater Voltage	6.3	Volts
Heater Current	.6 ± 10%	Amperes
Anode Voltage[1]	20,000	Max. Volts D.C.
Grid No. 4 Voltage (Focus Electrode)	-500 to +1,000	Max. Volts D.C.
Grid No. 2 Voltage	500	Max. Volts D.C.
Grid No. 1 Voltage		
Negative Peak Value	200	Max. Volts D.C.
Negative Bias Value	140	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 during warm-up period not to exceed 15 seconds	410	Max. Volts D.C.
After equipment warm-up	180	Max. Volts D.C.
Heater positive with respect to cathode	180	Max. Volts D.C.

TYPICAL OPERATING CONDITIONS

Anode Voltage	16,000	Volts D.C.
Grid No. 4 Voltage	0 to 450	Volts D.C.
Grid No. 2 Voltage	300	Volts D.C.
Grid No. 1 Voltage[2]	-28 to -72	Volts D.C.

MAXIMUM CIRCUIT VALUES

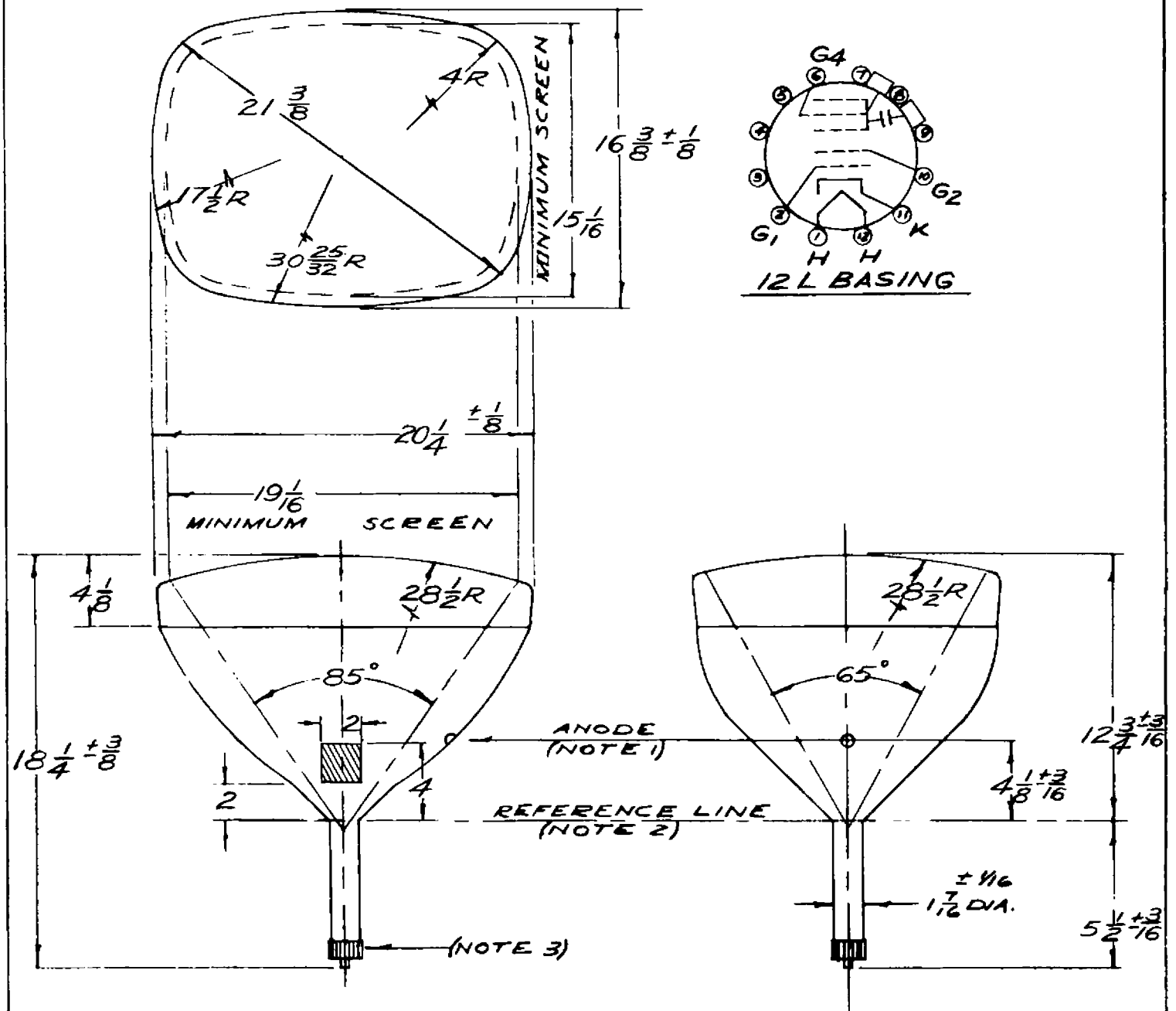
Grid No. 1 Circuit Resistance	1.5	Max. Megohms

NOTES

[1]Because the rating of the tube permits anode voltages as high as 22 kilovolts (absolute maximum), shielding of x-ray radiation from the tube may be necessary. This precaution should be observed when the anode is operated in excess of 16 kilovolts.

[2]Visual extinction of focused raster.

21DRP4



12L BASING

NATIONAL VIDEO CORP.

CHICAGO 32, ILLINOIS

DRAWN BY	SCALE	EFFECTIVE	SUPERSEDES	DISTRIBUTION
J.E. KUS	8" = 1"	3-4-58	ORIGINAL	A, B, C, D, E, F, G, H

NOTES

NOTE 1: The plane through the tube axis and vacant pin position #6 aligns with the anode contact $\pm$ 30°.

NOTE 2: Reference line is determined by the plane where the standard JETEC reference line gauge #116 will stop against the bulb.

NOTE 3: Socket for this base should not be rigidly mounted. It should have flexible leads and be free to move.