

17DLP4
CATHODE RAY TUBE

17 INCH, RECTANGULAR, GLASS	14-3/4 BY 11-11/16 INCH PICTURE SIZE
FOCUS -- ELECTROSTATIC	FACEPLATE -- SPHERICAL, GRAY
DEFLECTION -- MAGNETIC	NON ION-TRAP GUN
110 DEGREE DEFLECTION ANGLE	ALUMINIZED SCREEN
LIGHTWEIGHT BULB	EXTERNAL CONDUCTIVE COATING

=====DESCRIPTION AND RATING=====

The 17DLP4 is a 17 inch electrostatic-focus and magnetic-deflection glass, lightweight picture tube. Outstanding features include a short over-all length, a small neck diameter and a non ion-trap gun. The fluorescent screen is aluminized to increase light output and reduce undesirable screen charging. An external conductive coating is provided to serve as a filter capacitor when grounded.

GENERAL

ELECTRICAL

Heater Voltage.....	6.3	Volts
Heater Current.....	0.6 $\pm$ 10%	Amperes
Heater Warm-Up Time*.....	11	Seconds

Focusing Method - Electrostatic

Deflecting Method - Magnetic

Deflection Angle, Approximate

Diagonal	110	Degrees
Horizontal.....	105	Degrees
Vertical.....	87	Degrees

Direct Interelectrode Capacitances, Approximate

Cathode to All Other Electrodes.....	5	uuf
Grid No. 1 to All Other Electrodes.....	6	uuf

External Conductive Coating to Anode

Maximum	1500	uuf
Minimum.....	1000	uuf

CATHODE RAY TUBE DEPARTMENT

GENERAL  ELECTRIC

Syracuse, N. Y.

OPTICAL

Phosphor Number - P₄, Sulfide
Fluorescent Color - White
Phosphorescent Color - White
Persistence - Short
Faceplate - Gray
Light Transmission at Center, Approximate..... 76 Percent

MECHANICAL

Over-all Length.....11-1/16 + 5/16 Inches
Neck Length.....3-15/16 + 3/16 - 1/8 Inches
Greatest Bulb Dimensions
Diagonal.....16-9/16 + 1/8 Inches
Width.....15-5/8 + 1/8 Inches
Height.....12-3/4 ± 1/8 Inches
Minimum Useful Screen Dimensions
Diagonal.....15-3/4 Inches
Width.....14-3/4 Inches
Height.....11-11/16 Inches
Area.....155 Square Inches

Bulb Designation - J132-1/2A1
Bulb Contact - Recessed small-cavity Cap, JETEC No. J1-21
Base-Small-button Eightar, 6 pin, JEDEC No. B6-212
Basing Designation - 8JS
Bulb Contact Alignment
Anode Contact Aligns with Pin No. 4 ± 30 Degrees

Mounting Position - Any
Net Weight, Approximate.....10-1/3 Pounds

MAXIMUM RATINGS

DESIGN - CENTER VALUES

Anode Voltage.....18000 Max Volts DC
Focusing-Electrode Voltage..... - 500 to + 1000 Max Volts DC
Grid No.2 Voltage.....700 Max Volts DC
Grid No. 1 Voltage
Negative-Bias Value.....140 Max Volts DC
Positive-Bias Value..... 0 Max Volts DC
Positive-Peak Value..... 2 Max Volts
Negative-Peak Value.....200 Max Volts

Peak Heater-Cathode Voltage
Heater Negative with respect to Cathode
During Warm-up Period not to exceed 15 Seconds.....410 Max Volts
After Equipment Warm-up Period.....180 Max Volts
Heater Positive with respect to Cathode.....180 Max Volts

TYPICAL OPERATING CONDITIONS

Anode Voltage $\mathcal{S}$	17000	Volts DC
Focusing-Electrode Voltage for Focus	0 to 500	Volts DC
Focusing-Electrode Current.....	- 15 to +25	Microamperes DC
Grid No. 2 Voltage.....	450	Volts DC
Grid No. 1 Voltage π	- 28 to - 72	Volts DC

MAXIMUM CIRCUIT VALUES

Grid No. 1 Circuit Resistance.....	1.5	Max Megohms
Grid No. 2 Circuit Resistance.....	0.1	Min. Megohms
Focusing-Electrode Circuit Resistance.....	0.1	Min. Megohms

Protective resistance in Grid No. 2 and focusing-electrode circuits is advisable to prevent damage to tube. If applicable, one resistor, common to both circuits may be used.

* Heater warm-up time is the time required for the voltage across the heater terminals to increase to 5.0 volts in the JETEC test circuit, with $E = 25$ volts and $R = 31.5$ ohms.

+ The maximum ratings provide a ten percent safety factor in accordance with the standard design center system of rating cathode ray tubes. The tube will withstand the combined effects of variations in line voltage and components provided the maximum design center values are not exceeded by more than ten percent.

≠ Anode, Grid No. 3 and Grid No. 5 which are connected together within the tube are referred to herein as anode.

If this tube is operated at voltages in excess of 16,000 volts, X-ray radiation shielding may be necessary to avert possible danger of personal injury from prolonged exposure at close range. The protective face-viewing window of apparatus using tubes of this type may provide such a safeguard. If the radiation measured in contact with this window does not exceed 6.25 milliroentgens per hour, the window will normally provide adequate protection.

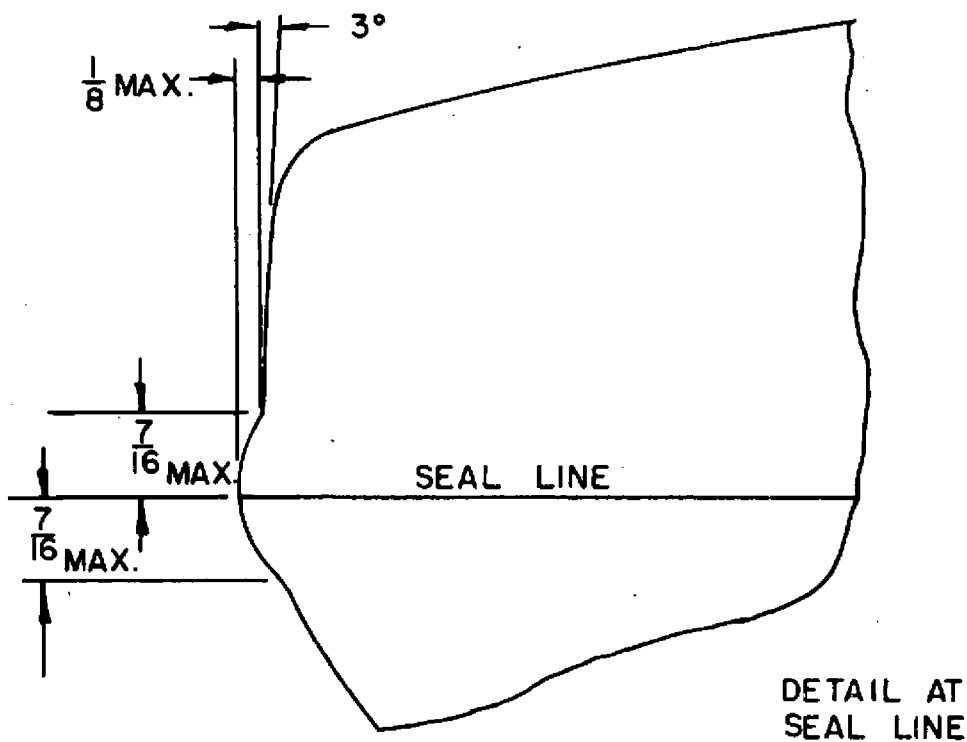
$\mathcal{S}$ Brightness and focus quality decrease with decreasing anode voltage. In general, the anode voltage should not be less than 15,000 volts.

π For visual extinction of focused raster.

Electronics Components Division

GENERAL ELECTRIC COMPANY

Syracuse, New York



NOTES:

1. THE REFERENCE LINE IS DETERMINED BY THE INTERSECTION OF THE PLANE C-C' OF GAGE (E.I.A. NO. 126) WITH THE GLASS FUNNEL.
2. DEFLECTION ANGLE ON THE DIAGONAL IS 110°.
3. ANODE TERMINAL ALIGNS WITH PIN NO. 4 ± 30 DEGREES.
4. USE A NON-RIGIDLY MOUNTED SOCKET WITH FLEXIBLE LEADS. BOTTOM CIRCUMFERENCE OF BASE WAFER WILL FALL WITHIN 1-3/4 INCH DIAMETER CIRCLE CONCENTRIC WITH THE BULB AXIS.

