



19CAP4
Phototron
Picture
Tube

from JEDEC release #3461, Oct. 23, 1961

Focusing Method	Tri Potential
Deflecting Method.....	Magnetic
Deflecting Angle-Diagonal (Approx.)	110 Degrees
Horizontal	99 Degrees
Vertical	82 Degrees
Phosphor.....	P4 Aluminized
Fluorescence.....	White
Persistence.....	Medium
Faceplate.....	Grey Filter Glass
Light Transmission	78%(Approx.)

Heater Voltage.....	6.3 Volts
Heater Current.....	.6 Ampere $\pm$ 5%
Direct Interelectrode Capacitances(Approx.)	
Cathode to ALL Other Electrodes.....	5 uuf
Grid No. 1 to ALL Other Electrodes.....	6 uuf
Ion Trap Magnet.....	None

Minimum Useful Screen Dimensions.....	15 1/8 x 12 Inches
Minimum Useful Screen Area (Approx.).....	172 Sq. In.
Bulb Contact (Recessed Small Cavity Cap).....	JL-21
Base (Small Wafer Eightar 7 Pin).....	B7-208
Basing.....	8JR
JL-21 Contact Aligns with Pin Position No. 4 ± 30 Degrees	
Bulb Weight.....	13 1/2 Lbs

MAXIMUM RATINGS (Design Maximum Values)

Anode Voltage (Note 1).....	20,000 Volts dc
Grid No. 1 Voltage (Focusing electrode)....	-350 to +700 Volts dc
Grid No. 2 Voltage.....	600 Volts dc
Grid No. 1 Voltage	
Negative Bias Value.....	154 Volts dc
Positive Bias Value.....	0 Volts dc
Positive Peak Value.....	2 Volts
Peak Heater-Cathode Voltage (Note 2)	
Heater Negative with Respect to Cathode	
During Warm-up Period Not to exceed, 15 sec. ...	450 Volts dc
After Equipment Warm-up Period	200 Volts dc
Heater Positive with Respect to Cathode.....	200 Volts dc

Anode Voltage	16,000 Volts dc
Grid No. 3 Voltage (Note 3)	0 to + 400 Volts dc
Grid No. 2 Voltage.....	500 Volts dc
Grid No. 1 Voltage (Note 4)	-43 To -78 Volts dc

Grid No.1 Circuit Resistance.....	1.5	Max.	Megohm
External Conductive Coating to Anode			
Capacitance	1500	uuf.	Max.
.....	1000	uuf.	Min.

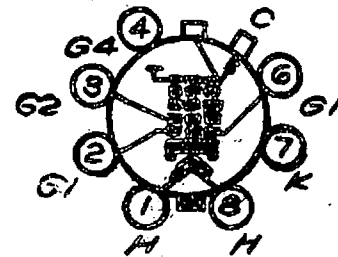
NOTES

4. Visual extrinction of focused raster. Extinction of stationary focused spot will require that these values be about 5 volts more negative.

THOMAS ELECTRONICS, INC.
118 9th STREET
PASSAIC, NEW JERSEY

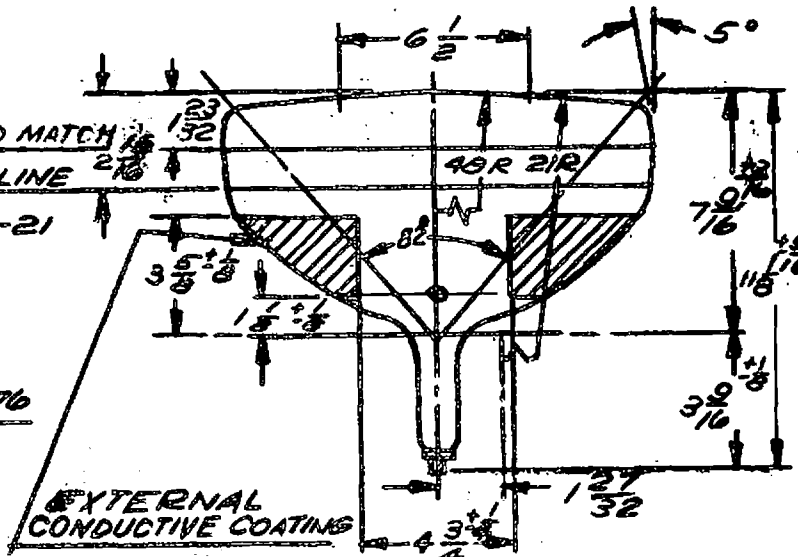
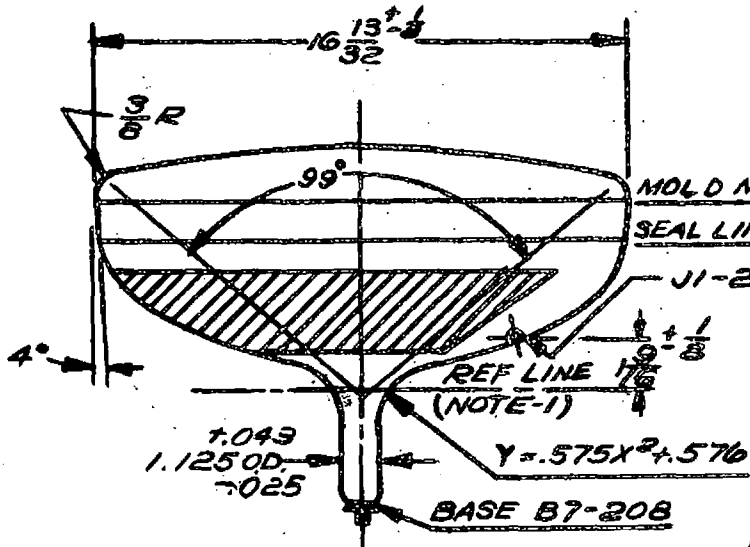
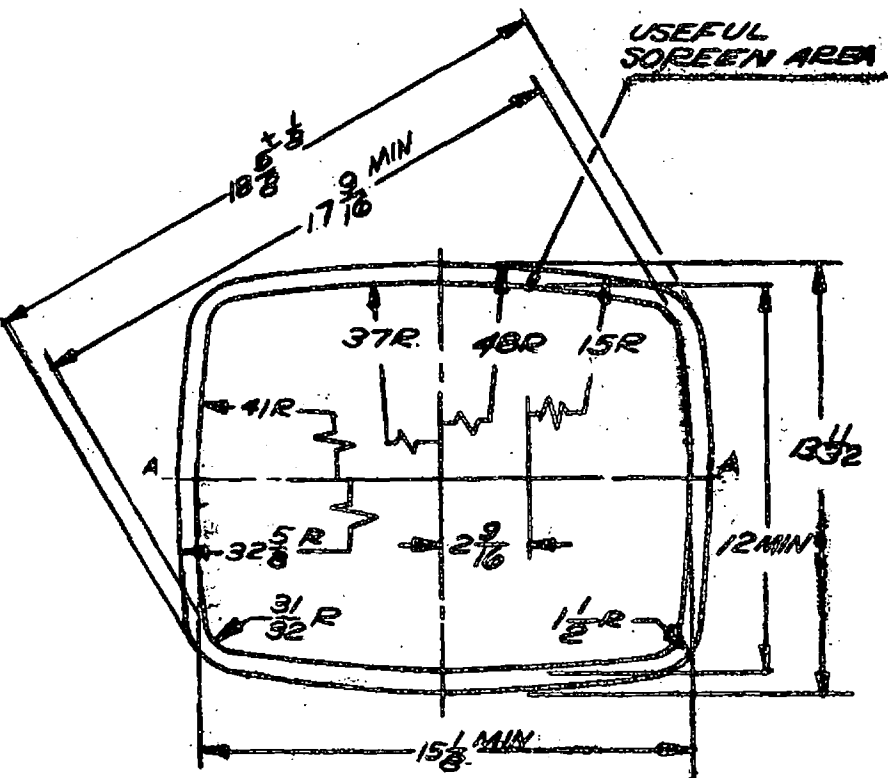
SOCKET CONNECTIONS BOTTOM VIEW

CL }
G3 } ANODE
G5 }



8 HR

PIN 1 : HEATER
PIN 2 : GRID N° 1
PIN 3 : GRID N° 2
PIN 4 : GRID N° 4
PIN 6 : GRID N° 1
PIN 7 : CATHODE
PIN 8 : HEATER
CAP : ANODE (GRID N° 3,
GRID N° 5 COLLECTOR
C : EXTERNAL
CONDUCTIVE COATING



1. Reference Line is determined by plane C-C' of JEDEC No. 126 Reference Line Gauge, when the gauge is seated against the bulb.
2. Base Pin No. 4 aligns with horizontal centerline (A-A') within 30° and is on same side as anode contact, J1-21.
3. Dimensions are in inches.
4. External Conductive Coating must be grounded.
5. Anti-corona coating around connector.
6. Bulge at splice-line seal may increase the indicated maximum value for envelope width, diagonal, and height by not more than 1/4", but at any point around the seal, the bulge will not protrude more than 1/8" beyond the envelope width, diagonal, and height.