CATHODE RAY TUBE

8-INCH, RECTANGULAR, GLASS	7-3/16 BY 5-3/8 INCH PICTURE SIZE
ELECTROSTATIC FOCUS	FACEPLATE: SPHERICAL, GRAY
MAGNETIC DEFLECTION	HIGH RESOLUTION
70-DEGREE DEFLECTION ANGLE	ALUMINIZED SCREEN

DESCRIPTION AND RATING

The 8RP4 is an eight inch electrostatic focus and magnetic deflection cathode ray tube for monitor use in closed circuit television, studio broadcasting, and industrial applications. Outstanding features include a 70° deflection angle for a better center to edge focusing characteristic with a reduced deflection power requirement and a high resolution, non-ion trap electron gun.

GENERAL

ELECTRICAL

Heater Voltage	6.3	Volts
Heater Current	0.3 ± 10%	Amperes

Focusing Method - Electrostatic
Deflecting Method - Magnetic

Deflection Angle, Approximate		
Diagonal	70	Degrees
Horizontal	64	Degrees
Vertical	50	Degrees

Direct Interelectrode Capacitances, Approximate		
Cathode to All Other Electrodes	5	μμf
Grid No. 1 to All Other Electrodes	6	μμf

CATHODE RAY TUBE DEPARTMENT
GENERAL ELECTRIC
Syracuse, N. Y.

from JEDEC release #4067, Jan. 7, 1963

OPTICAL

Phosphor Number - P4
Fluorescent Color - White
Phosphorescent Color - White
Persistence - Short
Faceplate - Gray

Light Transmission at Center, Approximate	80	Percent

MECHANICAL

Over-all Length	11-1/2 ± 1/4	Inches
Neck Length	5-3/16 ± 3/16	Inches
Greatest Bulb Dimensions		
Diagonal	8-7/16 ± 1/8	Inches
Width	6-1/16 ± 1/8	Inches
Height	7-7/8 ± 1/16	Inches
Minimum Useful Screen Dimensions		
Diagonal	7-13/16	Inches
Width	7-3/16	Inches
Height	5-3/8	Inches
Area	35.5	Square Inches

Bulb Contact - Recessed Small - Cavity Cap, JETEC No. J1-22
Base - B7-208
Basing, JETEC Designation - 8MC
Anode Contact Aligns With Pin No. 1 Position ± 30 Degrees.
Bulb Contoured to Fit 110° Deflection Yoke.
Mounting Position - Any

Net Weight, Approximate	3	Pounds

MAXIMUM RATINGS

DESIGN CENTER VALUES +

Anode Voltage	20,000	Max. Volts DC
Focusing Electrode Voltage	+600	Max. Volts DC
Grid No. 2 Voltage	700	Max. Volts DC
Grid No. 1 Voltage		
Negative-Bias Value	-120	Max. Volts DC
Positive-Bias Value	0	Max. Volts DC

DESIGN CENTER VALUES + (Continued)

Peak Heater-Cathode Voltage		
Heater Negative With Respect to Cathode	180	Max. Volts
Heater Positive With Respect to Cathode	180	Max. Volts

TYPICAL OPERATING CONDITIONS

Anode Voltage	16,000	Volts DC
Grid No. 2 Voltage	300	Volts DC
Grid No. 1 Voltage *	-33 to -72	Volts DC
Focusing Electrode Voltage	-100 to +400	Volts DC
Line Width "A"+++	.012	Inches Max.

MAXIMUM CIRCUIT VALUES

Grid No. 1 Circuit Resistance	1.5	Max. Meg.

NOTES:

\+ 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.

* For visual extinction of focused raster.

+++ Measured in accordance with MIL-E-1 paragraph 4.12.6.2 at an anode current of 100μa.

WARNING:

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.

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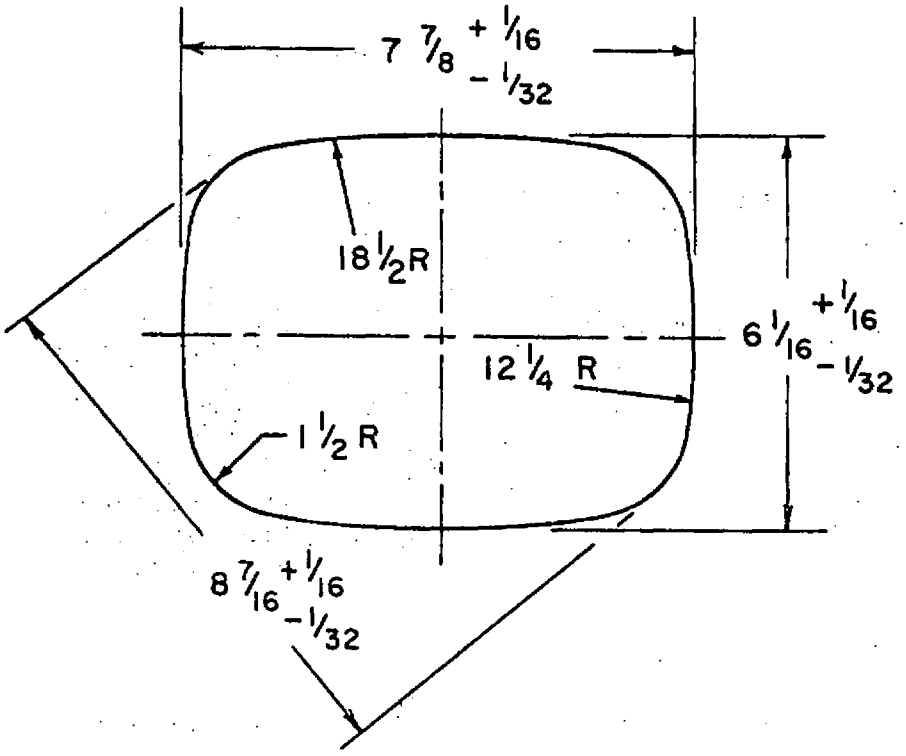
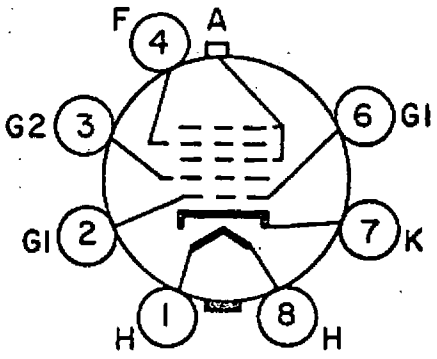
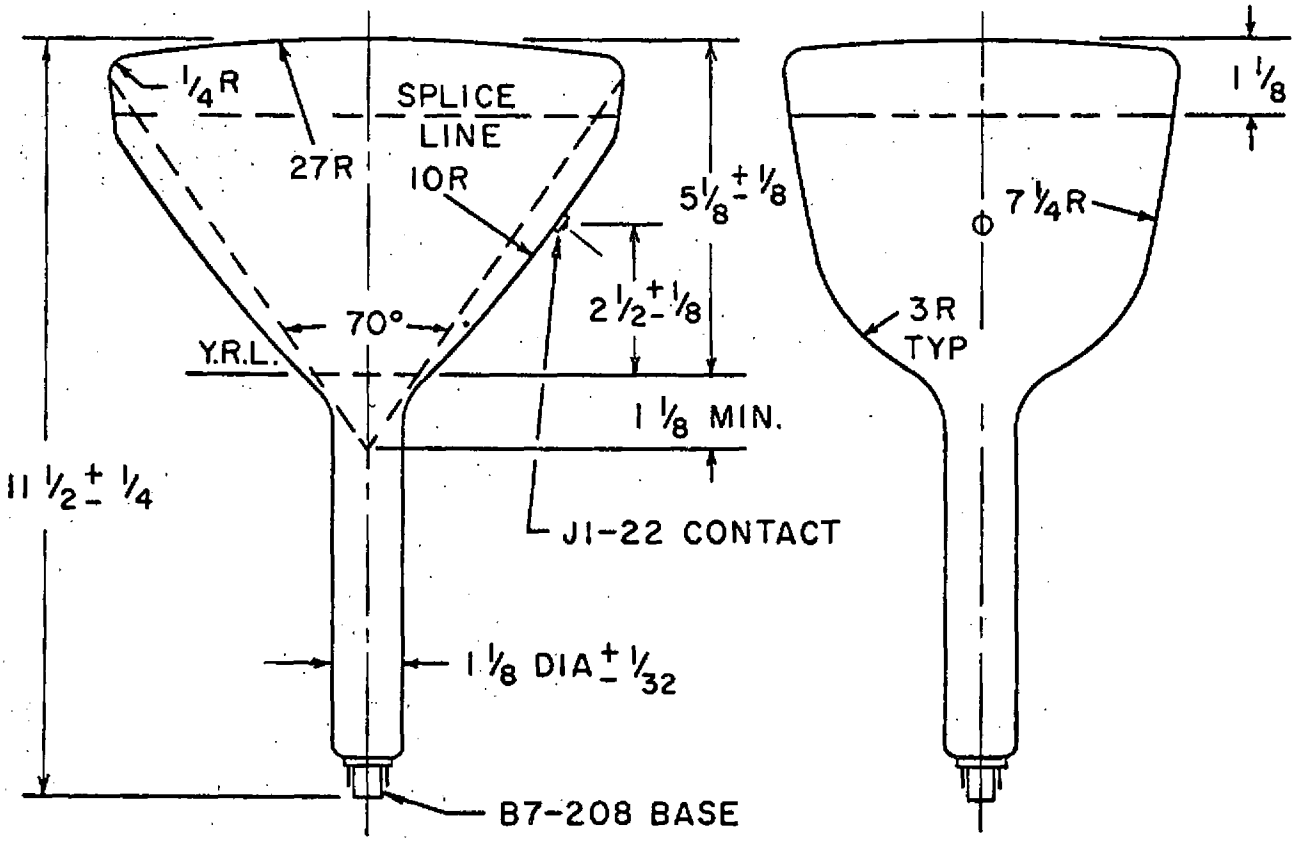




BASING DIAGRAM
8MC

NOTE:
PIN NO. 1 TO ALIGN
WITH J1-22 CONTACT



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