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DUMONT

CATHODE-RAY TUBE

8MP-

The 8MP- is a small, electrostatic focus and magnetic deflection, cathode-ray tube, using an 8-inch, rectangular, glass envelope. It is designed particularly for monitor applications. The electron gun features a low-voltage focus system, and is of the straight-gun type, designed to eliminate the need for an ion trap magnet. An external conductive coating is provided to serve as a filter capacitor. The screen is aluminized for high light output and increased contrast.

GENERAL CHARACTERISTICS

Electrical Data

Focusing Method	Electrostatic	
Deflecting Method	Magnetic	
Deflection Angle, Approximately		
Horizontal	85	Degrees
Vertical	68	Degrees
Diagonal	90	Degrees
Direct Interelectrode Capacitances, Approx.		
Cathode to all other electrodes	5	µµf
Grid No. 1 to all other electrodes	6	µµf
External Conductive Coating to Accelerator	350	Max. µµf
	250	Min. µµf

Optical Data

Phosphor Number	18	4	
Fluorescent Color	White	White	
Persistence	Medium	Short	
Faceplate		Spherical	
Light Transmission at Center, Approx.		80	Percent

Mechanical Data

Overall Length	$9\ 15/16 \pm 5/16$	Inches
Greatest Dimensions of Bulb		
Diagonal	$8\ 7/16\ ^{+\ 1/16}_{-\ 1/32}$	Inches
Width	$7\ 7/8\ ^{+\ 1/16}_{-\ 1/32}$	Inches
Height	$6\ 1/16\ ^{+\ 1/16}_{-\ 1/32}$	Inches

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Allen B. Du Mont Laboratories, Inc.
Clifton, New Jersey

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GENERAL CHARACTERISTICS (MECHANICAL DATA) (Continued)

Minimum Useful Screen Dimensions		
Diagonal	7 13/16	Inches
Width	7 3/16	Inches
Height	5 3/8	Inches
Area	35 1/2	Sq. Inches
Neck Length	6 ± 3/16	Inches
Bulb Number	J67 1/2	
Bulb Contact	J1-21	
Base	B6-63	
Basing	12L	
Bulb Contact Alignment		
J1-21 Contact aligns with Pin Position No. 6	± 30	Degrees
Weight	2 1/2	Pounds (Approx.)

RATINGS (ABSOLUTE MAXIMUM VALUES)

Heater Voltage	6.3	Volts
Heater Current at 6.3 Volts	0.6 ± 10%	Ampere
Accelerator Voltage	18,000	Max. Volts DC
Accelerator Input	6	Max. Watts
Focusing Electrode Voltage	-550 to + 1,100	Max. Volts DC
Grid No. 2 Voltage	550	Max. Volts DC
Grid No. 1 Voltage		
Negative Bias Value	155	Max. Volts DC
Negative Peak Value	220	Max. Volts
Positive Bias Value	0	Max. Volts DC
Positive Peak Value	2	Max. Volts
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

Accelerator Voltage	15,000	Volts DC
Focusing Electrode Voltage [1]	0 to 450	Volts DC
Focusing Electrode Current	-25 to +25	μA
Grid No. 2 Voltage	300	Volts DC
Grid No. 1 Voltage [2]	-28 to -72	Volts DC
Resolution at 100 μA [3]	600	Lines Min.

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MAXIMUM CIRCUIT VALUES

Grid No. 1 Circuit Resistance	1.5	Max. Megohms

NOTES

1. With the combined Grid No. 1 bias voltage and video-signal voltage adjusted to give an accelerator current of 100 microamperes on a 7 3/16 x 5 3/8-inch picture size.
2. Visual extinction of focused 7 3/16 x 5 3/8-inch raster.
3. Measured at the center of the screen.

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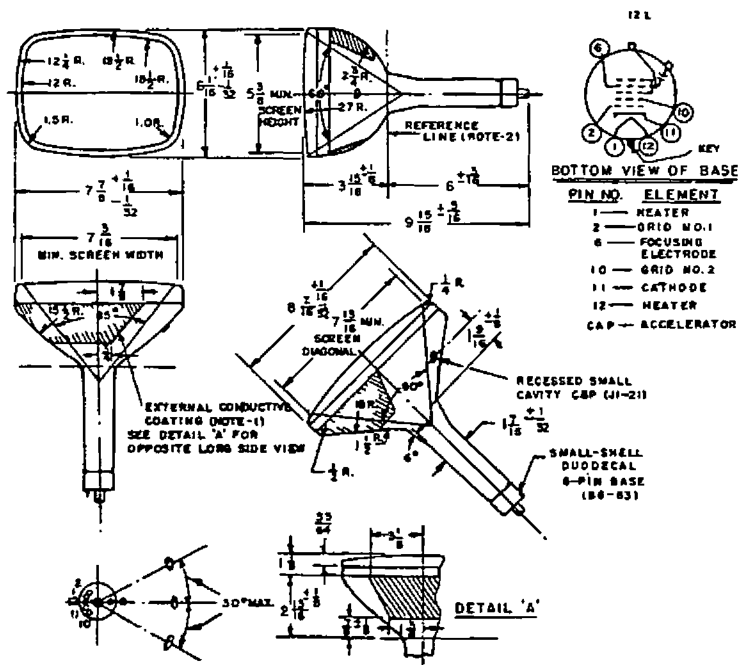

NOTE:

1. EXTERNAL CONDUCTIVE COATING MUST BE GROUNDED.
2. WHEN TUBE NECK IS INSERTED THROUGH REFERENCE LINE GAUGE JEDEC NO. G-116 REFERENCE LINE WILL BE DETERMINED BY PLANE C-C' WHEN GAUGE IS RESTING ON FUNNEL.

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