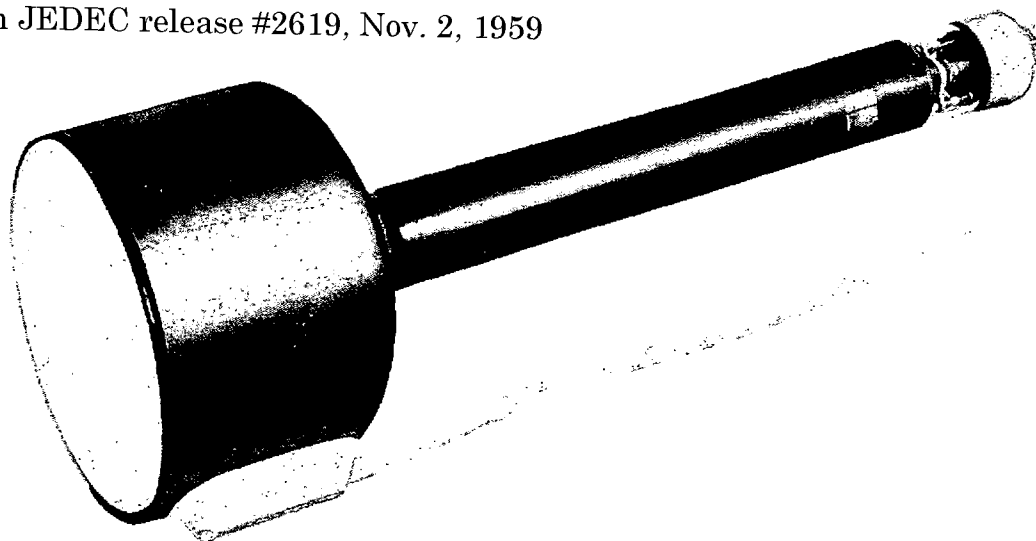


DU MONT

INDUSTRIAL CATHODE-RAY TUBES

TYPE:
5CKP1, 5CKP16

from JEDEC release #2619, Nov. 2, 1959



GENERAL CHARACTERISTICS ELECTRICAL DATA

Focusing Method	Magnetic
Deflection Method	Magnetic
Deflection Angle (Approx.)	42 Degrees
Direct Interelectrode Capacitances, Approx. Values	
Cathode to all other electrodes	2.0 μ uf
Grid #1 to all other electrode	9.0 μ uf

OPTICAL DATA

Phosphor Number	1	16
Fluorescence	Green	Violet
Persistence	Medium	Extremely Short
Faceplate	Clear, non-browning	

MECHANICAL DATA

Overall Length	16% $\pm$ 3/32 Inches
Greatest Diameter of Bulb	5 1/4 $\pm$ 3/32 Inches
Minimum useful screen diameter	4 1/4 Inches
Neck Length	12 1/2 Inches
Bulb Contact	Special Molded Contact
Bulb Contact Alignment:	
Centerline of molded contact aligns with	
Vacant Pin Position #3	$\pm$ 10 Degrees
Base	B7-51
Basing	12 AM
Weight (Approx.)	2 Pounds

MAXIMUM RATINGS

(Design Center Values)

Heater Voltage	6.3 Volts
Heater Current at 6.3 Volts	0.6 $\pm$ 10% Ampere

Accelerator Voltage	20,000 Max. Volts DC
Grid No. 2 Voltage	1,250 Max. Volts DC
Grid No. 1 Voltage	
Negative Bias Value	200 Max. Volts DC
Positive Bias Value	—2 Max. Volts DC
Positive Peak Value	0 Max. Volts
Peak Heater to 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	20,000 Volts DC
Grid No. 2 Voltage	1,000 Volts DC
Grid No. 1 Voltage ¹	—35 to —110 Volts DC
Line Width "A"	.001 Inch Max.
Focusing Coil Current ¹	135 Approx. Ma. DC
Spot Position ¹	Within a 15 mm. Radius Circle

MAXIMUM CIRCUIT VALUES

Grid #1 Circuit Resistance	1.5 Max. Megohms
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NOTES

1. Visual extinction of the undeflected, focused spot.
2. For an accelerator current of 25 μ ADC. Line width is measured with a 525-line interlaced pattern, the pattern width adjusted to 90% of minimum useful screen diameter. Line width is the merged focused raster height divided by the number of lines (525) measured in the tube face center.
3. Using JETEC #106 Focus coil, with Grid No. 1 bias voltage adjusted to produce an accelerator current of 25 microamperes and with the distance from reference line to center of air gap equal to 3 1/2 inches.
4. The center of the undeflected, unfocused spot will fall within a 15 mm. radius circle concentric with the tube face center, with the tube shielded.
5. If this tube is operated at voltages in excess of 16,000 volts, X-ray radiation shielding may be necessary to protect against possible danger of personal injury from prolonged exposure at close range. Such protection may be provided by the protective face viewing window of apparatus using tubes of this type. Protection will be adequate if the radiation measured in contact with the face viewing window is not in excess of 6.25 mr/hr.

FEATURES

- High Resolution with one mil Spot Size*
- Uses Conventional Focus Coil
- Uses Conventional Deflection Yoke
- Extremely Fine Screen With Minimum Voids
- Flat-Non-Browning Faceplate Ground and Polished
- Optical Quality Faceplate
- Molded Accelerator Lead For High Voltage and High Altitude Operation
- Light Weight

*Measured by Shrinking Raster Method

APPLICATIONS

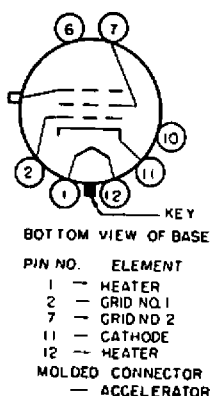
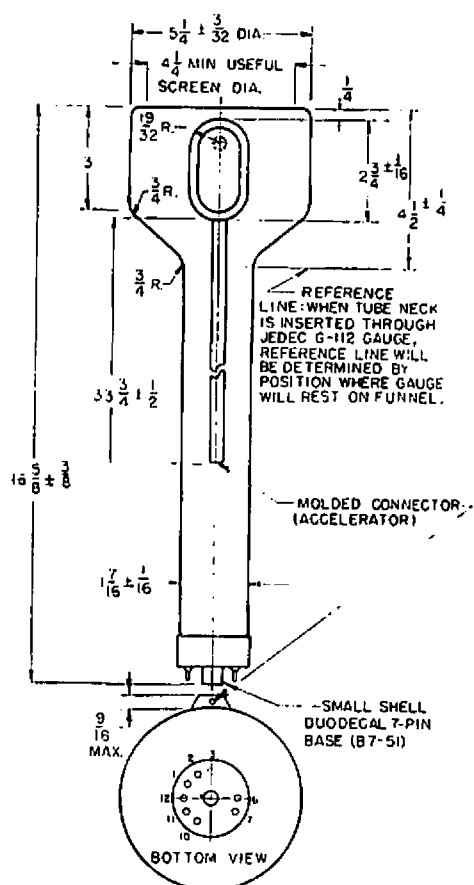
- Flying Spot Scanner
- Precision Radar
- Photographic
- Intermediate Film Transmission Systems

DU MONT

ELECTRONIC TUBE SALES DEPARTMENT
750 Bloomfield Avenue

Clifton, New Jersey, U.S.A.

OUTLINE DRAWING TYPE 5CKP-



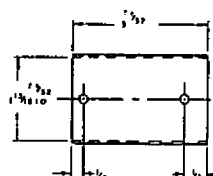
ACCESSORIES

For your convenience in ordering, from a single source, a complete line of accessories is available. Sockets recommended are the Du Mont part number 34003960 with mounting tabs and exposed contacts, or the self-supporting part number 34003620 with covered contacts. Base clamp 37007171 may be used with the 34003620 socket.

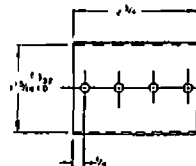
An adjustable, felt-lined, mu-metal shield, part number 243-4, can be used to shield the gun section of the tube when the tube is used in the presence of high electrostatic or magnetic fields. Adjustment is available to adapt the shield for a variety of deflection yoke sizes.

While this tube may be used with conventional deflection yokes, custom designed deflection yokes can be supplied to suit your unique applications. Information is available on request.

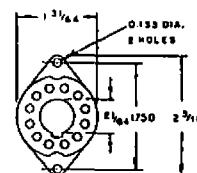
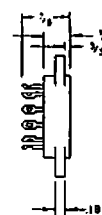
SHIELD PART #243-4



FELT-LINED BULB SECTION
Material: .025 mu-metal. 4 sets of 2 holes (0.166 dia.) equally spaced at 90° as shown.

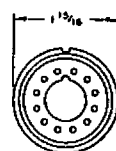
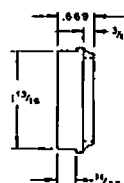


TELESCOPING HOOD SECTION
Material: 0.025 mu-metal. 4 sets of 4 holes (0.166 dia.) equally spaced at 90°, $\frac{1}{8}$ inch apart as shown.



12 PRONG (DUODECAL)

BASE SOCKET: DUMONT PART NO. 34003960



12 PRONG (DUODECAL)

BASE SOCKET: DUMONT PART NO. 34003620

TYPE 5CKP- AVERAGE CHARACTERISTICS

