PAN-O-PLY—INTEGRAL IMPSOLON PROTECTION
LOW-VOLTAGE ELECTROSTATIC FOCUS 114° MAGNETIC DEFLECTION

ELECTRICAL

Direct Inter electrode Capacitances
Cathode to all other electrodes... 5 pF
Grid No. 1 to all other electrodes... 6 pF
External conductive coating to anode a: 1250 min—1750 max pF

Heater Current at 6.3 V... 450 ± 20 mA
Heater Warm-up Time (Average)... 11 s

Electron Gun... Type Requiring No Ion-Trap Magnet

OPTICAL

Phosphor... P4—Sulfide Type, Aluminized
Faceplate... Filterglass
Light transmission at center (approx.)... 48%

MECHANICAL

Weight (Approx.)... 15 lb
Overall Length... 11.625 ± 0.250 in
Neck Length... 4.375 ± 0.125 in
Projected Area of Screen... 172 sq in

External Conductive Coating
Type (see CRT OUTLINES at front of this section)... Regular-Band
Contact area for grounding... Near Reference Line

Cap... Recessed Small Cavity (JEDEC No. J1-21)
Base... Small-Bottom Neonightar 7-Pin,
Arrangement 1, (JEDEC No. B7-208)

TERMINAL DIAGRAM (Bottom View)

Pin 1—Heater
Pin 2—Grid No. 1
Pin 3—Grid No. 2
Pin 4—Grid No. 4
Pin 6—Grid No. 1
Pin 7—Cathode
Pin 8—Heater

Cap—Anode
Grid No. 3,
Grid No. 5,
Screen,
Collector
C—External
Conductive
Coating

MAXIMUM AND MINIMUM RATINGS, DESIGN-MAXIMUM VALUES

V voltages are positive with respect to cathode

Anode Voltage... 11000 min—23000 max V

Grid-No. 4 (Focusing) Voltage
Positive value... 1100 max V
Negative value... 550 max V

Grid-No. 2 Voltage... 200 min—550 max V

Grid-No. 1 Voltage
Negative peak value... 220 max V
Negative bias value... 155 max V
Positive bias value... 0 max V
Positive peak value... 2 max V
Heater Voltage 5.7 min—6.9 max V
Peak Heater-Cathode Voltage
Heater negative with respect to cathode:
During equipment warm-up period ≤ 15 seconds 450 max V
After equipment warm-up period 300 max V
Heater positive with respect to cathode:
Combined AC & DC voltage 200 max V
DC component 100 max V

TYPICAL OPERATING CONDITIONS FOR CATHODE-DRIVE SERVICE
Voltages are positive with respect to grid No.1
Anode Voltage 16000 V
Grid-No.4 Voltage 200 V
Grid-No.2 Voltage 300 V
Cathode Voltage 28 to 62 V

MAXIMUM CIRCUIT VALUE
Grid-No.1 Circuit Resistance 1.5 max MΩ

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a. External conductive coating and implosion protection hardware must be grounded.
b. The grid-No.4 voltage required for optimum focus of any individual tube will have a value anywhere between 0 and +400 volts with the combined grid-No.1 voltage and video-signal voltage adjusted to give an anode current of 100 microamperes on a 10.5-inch by 14-inch pattern from an RCA-2P21 monoscope, or equivalent.

DIMENSIONAL OUTLINE (BULB J149 FA)

DIMENSIONS IN INCHES

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DATA
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