Picture Tube

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

ELECTRICAL

Direct Interelectrode 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**
For curves, see front of this section
Faceplate. . . . . . .Filterglass
Light transmission at center (approx.) 48%

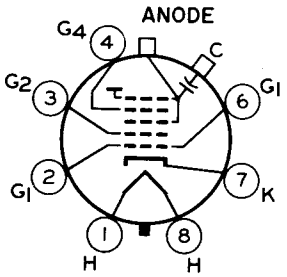
MECHANICAL

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 1 at front of this section) . . . **Regular-Band**
Contact area for grounding . . . . . .Near Reference Line
Cap. . . . . . **Recessed Small Cavity (JEDEC No.J1-21)**
Base . . . . . **Small-Button Neoeightar 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



8HR

Cap – Anode (Grid No.3, Grid No.5, Screen, Collector)
C – External Conductive Coating

MAXIMUM AND MINIMUM RATINGS, DESIGN-MAXIMUM VALUES

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[b]	200	V
Grid-No.2 Voltage	300	V
Cathode Voltage	28 to 62	V

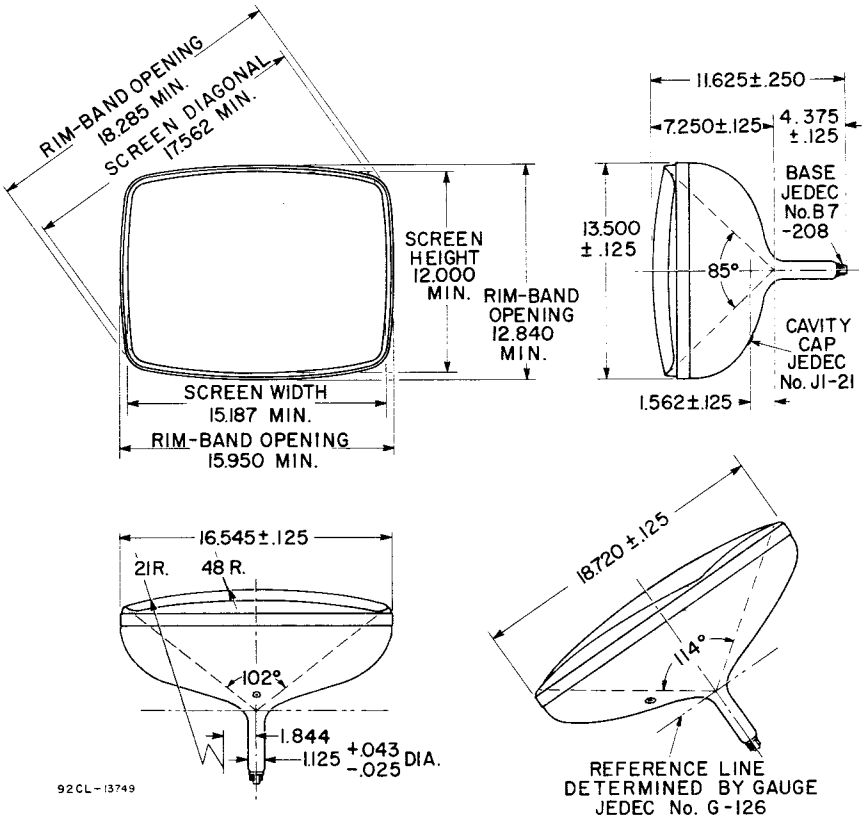
MAXIMUM CIRCUIT VALUE

Grid-No.1 Circuit Resistance	1.5 max	MΩ

[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-2F21 monoscope, or equivalent.

DIMENSIONAL OUTLINE (BULB J149 FA)



DIMENSIONS IN INCHES

RADIO CORPORATION OF AMERICA
Electronic Components and Devices Harrison, N. J.