Picture Tube

110° MAGNETIC DEFLECTION
LOW-VOLTAGE ELECTROSTATIC FOCUS

Direct Interelectrode Capacitances
- Cathode to all other electrodes: 5 pF
- Grid No.1 to all other electrodes: 6 pF
- External conductive coating to anode: 500 min—750 max pF

Heater Current at 6.3 V: 450 ± 20 mA
Heater Warm-Up Time (Average): 11 s
Electron Gun Type: Optical
Type Requiring No Ion-Trap Magnet

Phosphor: P4—Sulfide Type, Aluminized
Faceplate: Filterglass
Light transmission at center (approx.): 79%

MECHANICAL

Weight (Approx.): 4 lb
Overall Length: 8.785 ± 0.250 in
Neck Length: 4.125 ± 0.125 in
Projected Area of Screen: 60 sq in

External Conductive Coating Type: Regular-Dend Contact area for grounding: Near Reference Line
Cap: Recessed Small Cavity (JEDEC No.27-21)
Base: Small-Button Neoeightar 7-Pin
Arrangement 1, (JEDEC No.27-208)

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
Voltages are positive with respect to cathode

Anode Voltage: 8000 min—15000 max V
Grid-No.4 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 s. .......... 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 GRID-DRIVE SERVICE
Voltages are positive with respect to cathode
Anode Voltage ........................................ 12000 V
Grid-No.4 Voltage .................................. 0 to 400 V
Grid-No.2 Voltage .................................. 400 V
Grid-No.1 Voltage .................................. -39 to -94 V
For visual extinction of focused raster

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

* Includes implosion protection hardware.

For X-radiation shielding considerations, see sheet

X-RADIATION PRECAUTIONS FOR CATHODE-RAY TUBES at
front of this section

DIMENSIONAL OUTLINE (BULB J87A)

DIMENSIONS IN INCHES

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