NO ION-TRAP MAGNET REQUIRED

MAGNETIC FOCUS 70° 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 2000 max pF
750 min pF
Heater Current at 6.3 V. 600 ± 30 mA
Electron Gun Type Requiring No Ion-Trap Magnet

OPTICAL

Phosphor P4—Sulfide Type, Aluminized
Faceplate Filterglass
Light Transmission (Approx.) 66%

MECHANICAL

Weight (Approx.) 16 lb
Overall Length 18.750 ± 0.375 in
Neck Length 7.500 ± 0.188 in
Projected Area of Screen 139 sq in
External Conductive Coating
Type Regular-Band
Contact area for grounding Near Reference-Line

For Additional Information on Coatings and Dimensions
See Picture-Tube Dimensional-Outlines and Bulb J129A/B sheets
at front of this section

Cap. Recessed Small Cavity (JEDEC No.J1-21)
Base Small-Scale Duodecal 5-Pin (JEDEC Group 4, No.B5-57)
Basing Designation for BOTTOM VIEW 12N

Pin 1—Heater
Pin 2—Grid No.1
Pin 10—Grid No.2
Pin 11—Cathode
Pin 12—Heater
Cap—Anode (Grid No.3
Screen,
Collector)
C—External
Conductive Coating

MAXIMUM AND MINIMUM RATINGS, DESIGN-MAXIMUM VALUES

Unless otherwise specified, voltage values
are positive with respect to cathode

Anode Voltage 17500 max V
Grid-No.2 Voltage 450 max V
Grid-No.1 Voltage
Negative bias value 140 max V
Positive bias value 0 max V
Positive peak value 2 max V

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

DATA 10-65
### Heater Voltage
- $6.9 \text{ max } V$
- $5.7 \text{ min } V$

### Peak Heater-Cathode Voltage
- Heater negative with respect to cathode:
  - During equipment warm-up period not exceeding 15 seconds: $450 \text{ max } V$
  - After equipment warm-up period: $165 \text{ max } V$
- Heater positive with respect to cathode:
  - Combined AC and DC voltage: $165 \text{ max } V$
  - DC component: $100 \text{ max } V$

### Typical Operating Conditions for Grid-Drive Service

*Unless otherwise specified, voltage values are positive with respect to cathode*

- Anode Voltage: $12000 \text{ V}$
- Grid-No.2 Voltage: $300 \text{ V}$
- Grid-No.1 Voltage: $-28 \text{ to } -72 \text{ V}$

For visual extinction of focused raster.

### Maximum Circuit Value
- Grid-No.1-Circuit Resistance: $1.5 \text{ max } \Omega$

For X-radiation shielding considerations, see sheet *X-Radiation Precautions for Cathode-Ray Tubes* at front of this section.