



20HP4-A
20HP4-D

20HP4-A/20MP4, 20HP4-D PICTURE TUBES

RECTANGULAR GLASS TYPES

LOW-VOLTAGE ELECTROSTATIC FOCUS

MAGNETIC DEFLECTION

DATA

General:

Heater, for Unipotential Cathode:

Voltage 6.3 ac or dc volts

Current $0.6 \pm 10\%$ amp

Capacitance between External Conductive Coating and Ultor $\begin{cases} 1500 \text{ max. } \mu\text{f} \\ 500 \text{ min. } \mu\text{f} \end{cases}$ ←

Faceplate, Spherical Filterglass

Phosphor (For Curves, see front of this section)	Type 20HP4-A P4—Sulfide Type	Type 20HP4-D P4—Sulfide Type Aluminized
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Deflection Angles (Approx.):

Diagonal 70°

Horizontal 66°

Vertical 50°

Electron Gun Ion-Trap Type Requiring External Single-Field Magnet

Tube Dimensions:

Overall length $21\text{-}3/4" \pm 3/8"$

Greatest width $18\text{-}11/16" \pm 1/8"$

Greatest height $14\text{-}15/16" \pm 1/8"$

Diagonal $20\text{-}3/32" \pm 1/8"$

Neck length $7\text{-}1/2" \pm 3/16"$

Radius of curvature of faceplate (External surface) . . $40"$

Screen Dimensions (Minimum):

Greatest width $17"$

Greatest height $12\text{-}3/4"$

Diagonal $18\text{-}3/8"$

Projected area 199 sq. in.

Operating Position Any

Cap. Recessed Small Cavity (JETEC No. J1-21)

Base . . Small-Shell Duodecal 6-Pin (JETEC Group 4, No. B6-63) ←

Basing Designation for BOTTOM VIEW 12L

Pin 1—Heater

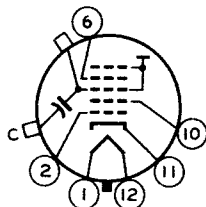
Pin 2—Grid No.1

Pin 6—Grid No.4

Pin 10—Grid No.2

Pin 11—Cathode

Pin 12—Heater



Cap—Ultor

(Grid No.3,
Grid No.5,
Collector)

C—External
Conductive
Coating

Maximum Ratings, Design-Center Values:

ULTOR VOLTAGE 16000 max. volts

GRID—No.4 (FOCUSING) VOLTAGE:

Positive value 1000 max. volts

Negative value 500 max. volts

GRID—No.2 VOLTAGE 500 max. volts

← Indicates a change.

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PICTURE TUBES

GRID-No.1 VOLTAGE:

Negative-bias value.	125 max.	volts
Positive-bias value.	0 max.	volts
Positive-peak value.	2 max.	volts

PEAK HEATER-CATHODE VOLTAGE:

Heater negative with respect to cathode:

During equipment warm-up period

not exceeding 15 seconds 410 max. volts

After equipment warm-up period 180 max. volts

Heater positive with respect to cathode. 180 max. volts

Maximum Circuit Values:

Grid-No.1-Circuit Resistance 1.5 max. megohms

*For X-ray shielding considerations, see sheet
X-RAY PRECAUTIONS FOR CATHODE-RAY TUBES
at front of this Section*