



ELECTRONIC TUBE REFERENCE

8HP4

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
CATHODERAY

Eight-inch P4 cathode-ray display tube for high-voltage direct visual service, using magnetic deflection and manufacturer-specified focusing, grid-control, and accelerating-voltage characteristics.

GENERAL CHARACTERISTICS

BASE DESIGNATION	12L	BASE PINS	6
NOMINAL HEATER	6.3 V / 600 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Cathode Ray

No fixed ratings recorded.

Cathode-ray section. CRT anode/ultor, grid, focus/deflection, heater-cathode, capacitance, and operating values are stored as section parameters.

Rectangular aluminized P4 monitor kinescope with low-voltage electrostatic focus, 90-degree magnetic deflection, and no ion-trap magnet requirement.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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Published test conditions and operating points. Values on this page are preserved as reported by this source.

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Section 1 · Cathode Ray

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cathode to All Other Electrodes Capacitance	5 pF	—
Grid #1 to All Other Electrodes Capacitance	9 pF	—
External Conductive Coating to Anode Capacitance	250–350 pF	—

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Focusing Method	Electrostatic	—
Deflecting Method	Magnetic	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode Voltage	—14000 V	Absolute maximum
Grid #4 Focusing Voltage - Positive	—1100 V	Absolute maximum
Grid #4 Focusing Voltage - Negative	—550 V	Absolute maximum
Grid #2 Voltage	—550 V	Absolute maximum
Grid #1 Negative Peak Voltage	—220 V	—
Grid #1 Negative Bias Voltage	—155 V	—
Grid #1 Positive Bias Voltage	—0 V	—
Grid #1 Positive Peak Voltage	—2 V	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	5.7–6.9 V	—
Peak Heater-Cathode Voltage - Heater Negative	—180 V	—
Peak Heater-Cathode Voltage - Heater Positive	—180 V	—
Anode Voltage	11000 V	GridDrive
Grid #4 Voltage	0–300 V	GridDrive
Grid #2 Voltage	300 V	GridDrive
Grid #1 Voltage for Visual Extinction	-72–-28 V	GridDrive
Grid #1 Circuit Resistance	—1.5 MΩ	Maximum circuit value

TUBE TINKER

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and their source documents.

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