

ELECTRONIC TUBE REFERENCE

23FMP4

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
CATHODERAY

Large aluminized P4 monochrome television picture tube for high-voltage direct-view service, using electrostatic focusing and magnetic deflection with manufacturer-specified operating characteristics for type 23FMP4.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / 450 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Cathode Ray	
MAXIMUM PLATE VOLTAGE	23000 V
CRT-specific ratings, operating conditions, capacitances, focus/deflection, cutoff, optical, and screen data are retained in section parameters.	

23ETP4-equivalent Pan-O-Ply television CRT with 450 mA heater rating.

SOURCE OPERATING CONDITIONS

1964 RMA EIA

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

1964 RMA EIA

Section 1 · Cathode Ray

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Focusing method	Electrostatic	—
Deflection method	Magnetic	—
Horizontal deflection angle	99 deg	—
Vertical deflection angle	82 deg	—
Diagonal deflection angle	110 deg	—
Heater voltage	6.3 V	—
Heater current	450 mA	—
Difference from 23ETP4	450 mA heater rating instead of 600 mA	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cathode-to-all capacitance	5 pF	—
Grid1-to-all capacitance	6 pF	—
External coating capacitance minimum	1700 pF	—
External coating capacitance maximum	2500 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode voltage maximum	23000 V	—
Anode voltage minimum	12000 V	—
Typical anode voltage	16000 V	—
Typical focus-electrode voltage	250 V	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical grid2 voltage	50 V	—

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	Monochrome television picture display	—



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1971 RCA HB3 Binder 1 of 7

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

1971 RCA HB3 BINDER 1 OF 7

Section 1 · Cathode Ray

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
e _h '~	10 V	Published CRT datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Heater ~urre~`. at 6.3 volts – published value 1	6.3 V	Published CRT datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Heater ~urre~`. at 6.3 volts – published value 2	450 V	Published CRT datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Heater ~urre~`. at 6.3 volts – published value 3	20 V	Published CRT datasheet value; multiple numbers on one source row represent separate limits or operating conditions.