ELECTRONIC TUBE REFERENCE

19BAP4

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
CATHODERAY

Nineteen-inch direct-view monochrome television picture tube with electrostatic focusing, magnetic deflection, and an aluminized P4 screen. Manufacturer documentation places it in the high-voltage picture-tube family used for bright, high-contrast receiver display.

General characteristics

BASE DESIGNATION	—	**BASE PINS**	—
NOMINAL HEATER	6.3 V / 300 mA	**PARALLEL HEATER**	— / —
HEATING	Indirect	**SERIES OPERATION**	Not specified
CATHODE ARRANGEMENT	Separate cathodes	**SECTION CONSTRUCTION**	Similar

Section ratings

SECTION1 Cathode Ray

MAXIMUM PLATE VOLTAGE	20000 V

Published ratings and characteristics promoted semantically from the approved source.

19BA direct-view monochrome television CRT with electrostatic focus, magnetic deflection, aluminized P4 screen, and gray/filter faceplate construction.

SOURCE OPERATING CONDITIONS

1950 Sylvania

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

1950 SYLVANIA

Section 1 · Cathode Ray

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	**20000 V**	—
Anode Voltage	**16000 V**	—

CHARACTERISTIC

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Phosphor	**P4**	Aluminized

SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

SOURCE PDF

1965 Sylvania Electronic Tubes Vol3

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

1965 SYLVANIA ELECTRONIC TUBES VOL3

Section 1 · Cathode Ray

CHARACTERISTICS

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Focusing method	**Electrostatic**	—
Deflection method	**Magnetic**	—
Horizontal deflection angle	**102 deg**	—
Diagonal deflection angle	**114 deg**	—
Vertical deflection angle	**86 deg**	—
Fluorescence	**White**	—
Persistence	**Short to medium**	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	**6.3 V**	—
Heater current	**600 mA**	—

CONSTRUCTION

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Phosphor	**Aluminized P4**	—

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum anode voltage	**20000 V**	—
Typical anode voltage	**16000 V**	—
Typical focus-electrode voltage maximum	**400 V**	—
Typical grid2 voltage	**400 V**	—
Cutoff voltage range	**-46 to -94 V**	—
Grid1 circuit resistance maximum	**1.5 Mohm**	—
Focus-electrode voltage minimum	**-550 V**	—
Focus-electrode voltage maximum	**1100 V**	—
Grid2 voltage maximum	**550 V**	—

CAPACITANCE

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid1-to-all capacitance	**6 pF**	—
External conductive coating to anode capacitance maximum	**1500 pF**	—

APPLICATION

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

Tube Tinker

An independent reference for electronic tubes, vacuum tubes, and their source documents.

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