ELECTRONIC TUBE REFERENCE

21ZP4B

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
CATHODERAY

Large P4 monochrome television picture tube for high-voltage direct-view service, using magnetic deflection and manufacturer-specified focusing and beam-control arrangements for type 21ZP4B.

General characteristics

BASE DESIGNATION	—	**BASE PINS**	12
NOMINAL HEATER	6.3 V / 620 mA	**PARALLEL HEATER**	— / —
HEATING	Indirect	**SERIES OPERATION**	Not specified
CATHODE ARRANGEMENT	Separate cathodes	**SECTION CONSTRUCTION**	Similar

Section ratings

SECTION1 Cathode Ray	
MAXIMUM PLATE VOLTAGE	18000 V
MAXIMUM SCREEN VOLTAGE	500 V
Maximum anode voltage mapped to MaxPlateVoltage; CRT grid/focusing limits retained as parameters rather than mis-promoted as ordinary screen-grid data.	

B-version of the 21ZP4 magnetic-focus television picture tube.

SOURCE OPERATING CONDITIONS

1961 Tung Sol

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

1961 TUNG SOL

Section 1 · Cathode Ray

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HighVoltageAnodeMaximum	**20000 V**	CRT

CAPACITANCE

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
CathodeToOtherElectrodesCapacitance	**5 pF**	Approximate

SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

SOURCE PDF

1966 Tung Sol Electronic Tubes 4 of 4

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

1966 TUNG SOL ELECTRONIC TUBES 4 OF 4

Section 1 · Cathode Ray

CONSTRUCTION

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Focusing method	**Magnetic**	—
Deflecting method	**Magnetic**	—
Phosphor	**P4**	White;MediumPersistence

CHARACTERISTIC

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Deflection angle	**70 deg**	Approximate
Faceplate light transmission at center	**75 %**	Approximate

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	**6.3 V**	—
Heater current	**600 mA**	—
Maximum DC anode voltage	**18000 V**	—
Maximum DC grid #2 voltage	**500 V**	—
Maximum grid #1 negative-bias magnitude	**125 V**	—
Maximum grid #1 positive DC voltage	**0 V**	—
Maximum grid #1 positive peak voltage	**2 V**	—
Typical DC anode voltage	**16000 V**	TelevisionPictureTube
Typical DC grid #2 voltage	**300 V**	TelevisionPictureTube
Typical grid #1 voltage minimum	**-77 V**	VisualExtinctionRange
Typical grid #1 voltage maximum	**-33 V**	VisualExtinctionRange
Maximum grid #1 circuit resistance	**1.5 megohm**	—
Focusing coil current	**100 mA**	Approximate
Ion trap magnet rated strength	**45 gauss**	Approximate
Ion trap current standard coil #111	**95 mA**	Approximate
X-ray shielding warning	**Present**	HighAnodeVoltage

CAPACITANCE

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cathode-to-all-other-electrodes capacitance	**5 pF**	Approximate
Grid #1-to-all-other-electrodes capacitance	**6 pF**	Approximate

APPLICATION

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	**Direct-view television picture tube**	—

SOURCE OPERATING CONDITIONS

1968 General Electric Co

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

1968 GENERAL ELECTRIC CO

Section 1 · Cathode Ray

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Anode Voltage	**18000 V**	—
Maximum Grid No. 2 Voltage	**500 V**	—
Anode Voltage	**16000 V**	Typical
Heater Voltage	**6.3 V**	—
Heater Current	**620 mA**	—

Tube Tinker

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

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