ELECTRONIC TUBE REFERENCE

21AQP4A

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
CATHODERAY

Twenty-one-inch direct-view monochrome television picture tube designed for large-screen receiver service. Manufacturer data documents its magnetic scanning system, high-voltage operation, and picture-tube optical and electrical characteristics.

General characteristics

BASE DESIGNATION	–	**BASE PINS**	5
NOMINAL HEATER	0.3 V / –	**PARALLEL HEATER**	– / –
HEATING	Indirect	**SERIES OPERATION**	Not specified
CATHODE ARRANGEMENT	Separate cathodes	**SECTION CONSTRUCTION**	Similar

Section ratings

SECTION1 Cathode Ray

MAXIMUM SCREEN VOLTAGE	5 V

CRT ratings, operating conditions, capacitances, optical and deflection data retained as parameters.

Direct-view cathode-ray picture tube for television display service. Electrical ratings, operating conditions, capacitances, optical data, and construction details were extracted from the supplied datasheet.

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

CHARACTERISTIC		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Vertical deflection angle	**68 deg**	—
Diagonal deflection angle	**90 deg**	—

CAPACITANCE		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Cathode to all other electrodes	**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

CHARACTERISTICS		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
FACEPLATE LIGHT TRANSMISSION AT CENTER (APPROX.)	**5 percent**	Published CRT datasheet value; multiple values on a row correspond to separate source-table conditions or limits.
HEATER	**0.3 V**	Published CRT datasheet value; multiple values on a row correspond to separate source-table conditions or limits.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HEATER POSITIVE WITH RESPECT TO CATHODE	**180 V**	Published CRT datasheet value; multiple values on a row correspond to separate source-table conditions or limits.
DC GRID #2 VOLTAGE	**2 V**	Published CRT datasheet value; multiple values on a row correspond to separate source-table conditions or limits.
ION TRAP MAGNET (RATED STRENGTH)	**45 mA**	Published CRT datasheet value; multiple values on a row correspond to separate source-table conditions or limits.
B INA SMUCX AS THE TUBE RATING PERMITS OPERATION AT VOLTAGES AS NIGX AS 19.8 KILOVOLTS (ABSOLUTE	**19.8 V**	Published CRT datasheet value; multiple values on a row correspond to separate source-table conditions or limits.
D VIGU AL ExTIMCTION OF UNDEFL ELTED FOCUSED 5P0 T.	**5**	Published CRT datasheet value; multiple values on a row correspond to separate source-table conditions or limits.
D FOR STANDARD FOCUS COIL 1109, OR EQUI YALE XT, WI TN TXE f.OMBINED GRID N1 BIAS VOLTAGE AND VIDEO	**1109 V**	Published CRT datasheet value; multiple values on a row correspond to separate source-table conditions or limits.
19 1/8" PICTURE SIZE. DISTANCE FROM REFERENCE LINE TO CENTER OF AIR GAP ON FOCUS CO II SMALL BE — value 1	**19 mA**	Published CRT datasheet value; multiple values on a row correspond to separate source-table conditions or limits.
19 1/8" PICTURE SIZE. DISTANCE FROM REFERENCE LINE TO CENTER OF AIR GAP ON FOCUS CO II SMALL BE — value 2	**1 mA**	Published CRT datasheet value; multiple values on a row correspond to separate source-table conditions or limits.
19 1/8" PICTURE SIZE. DISTANCE FROM REFERENCE LINE TO CENTER OF AIR GAP ON FOCUS CO II SMALL BE — value 3	**8 mA**	Published CRT datasheet value; multiple values on a row correspond to separate source-table conditions or limits.

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
MAXIMUM DC GRID #2 VOLTAGE — value 1	**2 V**	Published CRT datasheet value; multiple values on a row correspond to separate source-table conditions or limits.
MAXIMUM DC GRID #2 VOLTAGE — value 2	**5 V**	Published CRT datasheet value; multiple values on a row correspond to separate source-table conditions or limits.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
MAXIMUM GRID #1 VOLTAGE	**1 V**	Published CRT datasheet value; multiple values on a row correspond to separate source-table conditions or limits.
MAXIMUM GRID #i CIRCUIT RESISTANCE	**1.5 mA**	Published CRT datasheet value; multiple values on a row correspond to separate source-table conditions or limits.

Tube Tinker

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

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