

ELECTRONIC TUBE REFERENCE

SC3895

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
CATHODERAY

Nineteen-inch character-writing CRT for large-screen alphanumeric and vector display, using electrostatic focusing and deflection with post-deflection acceleration for a bright, precisely written image.

GENERAL CHARACTERISTICS

BASE DESIGNATION	B12-37	BASE PINS	14
NOMINAL HEATER	6.3 V / 600 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Cathode Ray	
MAXIMUM PLATE VOLTAGE	19800 V
Ratings and characteristics promoted from the supplied Sylvania source where explicitly published.	

Nineteen-inch character-writing CRT for large-screen alphanumeric and vector display, with electrostatic focus/deflection and post-deflection acceleration.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterOrFilamentVoltage	6.3 V	—
HeaterOrFilamentCurrent	600 mA	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
PostAcceleratorVoltage	19800 V	—



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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	—
Heater current	540 mA–660 mA	—
Anode input maximum	6 W	—
Anode No. 3 post-accelerator voltage maximum	19800 V	—
Anode No. 2 voltage maximum	11000 V	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode No. 1 focus-electrode voltage maximum	8000 V	—
Grid No. 1 negative bias maximum	-200 V	—
Grid No. 1 positive bias maximum	0 V	—
Grid No. 1 positive peak maximum	0 V	—
Grid No. 2 voltage maximum	800 V	—
Peak heater-cathode voltage maximum	180 V	—
Peak Anode No. 2 to deflecting-plate voltage maximum	1500 V	—
Anode No. 3 post-accelerator voltage	18000 V	—
Anode No. 2 voltage	10000 V	—
Grid No. 2 voltage	500 V	—
Anode No. 1 focus voltage	4800–5200 V	—
Grid No. 1 cutoff voltage	-150--50 V	—
Focus correction maximum	1000 V	—
Astigmatism correction maximum	350 V	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cathode to all other electrodes capacitance	7.5 pF	—
Grid No. 1 to all other electrodes capacitance	14 pF	—
Between deflecting plates 1-2 capacitance	6.4 pF	—
Between deflecting plates 3-4 capacitance	2.5 pF	—
Deflecting plate 1 to all other electrodes capacitance	13.7 pF	—
Deflecting plate 2 to all other electrodes capacitance	13.7 pF	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Deflecting plate 3 to all other electrodes capacitance	5.7 pF	—
Deflecting plate 4 to all other electrodes capacitance	5.7 pF	—
Grid No. 2 to all other electrodes capacitance	13.5 pF	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Deflection factor plates 1-2	90–140 V/in	—
Deflection factor plates 3-4	90–140 V/in	—
Center line width	0.025 in	—
Corner line width	0.04 in	—

CIRCUITVALUE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No. 1 circuit resistance maximum	1.5 Mohm	—
Deflection-plate circuit resistance maximum	1 Mohm	—