ELECTRONIC TUBE REFERENCE

D1321GM

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
CATHODERAY

Philips or Telefunken D-series cathode-ray instrument tube designed for oscillographic and measurement display, with manufacturer-defined electrostatic beam control, deflection, screen, and accelerating characteristics for type D1321GM.

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

No fixed ratings recorded.

Electrostatic deflection, accelerator/focus/grid voltages, sensitivities and limiting values reviewed.

D1321GM is a Philips high-frequency high-writing-speed metal-backed oscilloscope CRT. The supplied datasheet provides electrostatic-deflection, focusing, acceleration, screen and operating characteristics.

SOURCE OPERATING CONDITIONS

SOURCE PDF

1963 Philips Electron Tubes Handbook V2

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

1963 PHILIPS ELECTRON TUBES HANDBOOK V2

Section 1 · Cathode Ray

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	**6.3 V**	Published heater rating
Heater current	**300 mA**	Published heater rating
Screen fluorescence	**Purplish blue**	Screen
Screen phosphorescence	**Yellowish green**	Screen
Screen persistence	**Long**	Screen
Horizontal deflection factor	**27 to 33 V/cm**	OscilloscopeCRT
Vertical deflection factor	**5.7 to 7.1 V/cm**	OscilloscopeCRT

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Post-accelerator voltage	**10 kV**	OscilloscopeCRT
Isolation-shield voltage	**1670 V**	OscilloscopeCRT
Deflection-plate shield voltage	**1670 V**	OscilloscopeCRT
Second-accelerator voltage	**1670 V**	OscilloscopeCRT
Focusing-electrode voltage	**180 to 590 V**	OscilloscopeCRT
First-accelerator voltage	**1670 V**	OscilloscopeCRT
Grid No.1 voltage	**-50 to -80 V**	OscilloscopeCRT
Maximum horizontal linearity deviation	**1.5 %**	OscilloscopeCRT
Maximum vertical linearity deviation	**1 %**	OscilloscopeCRT

SOURCE OPERATING CONDITIONS

1999 Philips 0-D

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

1999 PHILIPS 0-D

Section 1 · Cathode Ray

CHARACTERISTICS

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	—
Heater current	300 mA	—
Horizontal deflection coefficient	19.8 V/cm	—
Vertical deflection coefficient	7.1 V/cm	—

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Final/accelerator voltage	10000 V	—
Focusing electrode voltage	180–590 V	—
First accelerator voltage	1670 V	—
Screen dissipation maximum	3 mW/cm2	—

CAPACITANCE

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid	6.4 pF	—
Cathode	3.9 pF	—
except	3 pF	—
except	3 pF	—
except	2.8 pF	—
except	2.8 pF	—
X1	1.9 pF	—
¥¢	1.5 pF	—

Tube Tinker

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