



ELECTRONIC TUBE REFERENCE

D1012BE

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

CATHODERAY

Philips instrument cathode-ray tube for oscilloscope or precision display service, using electrostatic beam control and manufacturer-specified focusing, acceleration, capacitance, screen, and deflection characteristics.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	14
NOMINAL HEATER	637 V / 300 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Cathode Ray

No fixed ratings recorded.

Published electrical ratings and operating data captured in promoted fields where directly applicable and additional parameter rows.

Philips cathode-ray tube intended for oscilloscope or instrument-display service. The datasheet specifies screen, heating, electrostatic deflection, accelerator/focusing voltages, capacitances, operating characteristics, and limiting values as applicable.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Useful screen diameter	0 mm	Published datasheet specification
Useful scan at Vgg/Vg,	4	Published datasheet specification
in the y direction	0 mm	Published datasheet specification
Heater voltage Vr	637 V	Published datasheet specification
Heater current Ir	300 mA	Published datasheet specification
Crid No.1 to all other electrodes Cgy	4 pF	Published datasheet specification
Cathode to all other electrodes Ck	3 pF	Published datasheet specification
except x2 plate Cx1q	4 pF	Published datasheet specification
except Xy plate Cx»	4 pF	Published datasheet specification
except yo plate Cyq	3	Published datasheet specification
except yç plate Cyo	3 pF	Published datasheet specification
Xy plate to x	1	Published datasheet specification
¥1 plate to yo plate Cy1_y9	1.7 pF	Published datasheet specification
Post accelerator voltage Vgg	4000 V	Published datasheet specification
Grid No.4 voltage V54	1000 V	Published datasheet specification
Grid No.2 voltage Vs2	1000 V	Published datasheet specification
Beam current I	10	Published datasheet specification
Line width l.w	0.35 mm	Published datasheet specification
Post accelerator voltage Vg	4000 V	Published datasheet specification
Isolation shield voltage Vgg	1000	Published datasheet specification
Second accelerator voltage Vgqy	1000	Published datasheet specification

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Focusing electrode voltage Vgz	20	Published datasheet specification
First accelerator voltage Vgo	1000 V	Published datasheet specification
Grid No.1 voltage Vg,	-25	Published datasheet specification
horizontal Mx	31 V	Published datasheet specification
vertical My	11.2 V	Published datasheet specification
deflection	2	Published datasheet specification
Pattern distortion	23	Published datasheet specification
Undelected spot position R	5 mm	Published datasheet specification
A small potential difference (max. *	4	Published datasheet specification
for a deflection of less than	5	Published datasheet specification
a deflection of	5	Published datasheet specification
square of	1 mm	Published datasheet specification
be within a concentric square of	9 mm	Published datasheet specification
Published specification	5000 V	Published datasheet specification
Post accelerator voltage Veg	1500 V	Published datasheet specification
Isolation shield voltage Vgs	2200 V	Published datasheet specification
Published specification	2200 V	Published datasheet specification
Second accelerator voltage Vgq - min	0 V	Published datasheet specification
Focusing electrode voltage V33	1500 V	Published datasheet specification
First accelerator voltage VEZ - min	0 V	Published datasheet specification
negative -Vg1	200 V	Published datasheet specification
peak positive +Vgqp	2	Published datasheet specification
Ratlo Vgg/Vg, Vge/Vgqy	4	Published datasheet specification
accelerator and any deflec~ Vggx p	500 V	Published datasheet specification
tion plate Vegs-y D	500 V	Published datasheet specification
cathode positive Vkr(k pos)	200 V	Published datasheet specification

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
cathode negative Vkr(k neg)	125 V	Published datasheet specification
dissipation Weo,84	6 W	Published datasheet specification
Screen dissipation Wp	3 mW/cm?	Published datasheet specification
Focusing voltage Vg3	50	Published datasheet specification
Grid No.1 voltage 2) ~Vgy	25	Published datasheet specification
Deflection factors at vgé/vgz,g4	4	Published datasheet specification
horizontal Mx	31 V/cm	Published datasheet specification
vertical My	11.2 V/cm	Published datasheet specification
resistance Rg1	1.5	Published datasheet specification
Grid No.3 current Igs	30	Published datasheet specification
Published specification	72	Published datasheet specification

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