



ELECTRONIC TUBE REFERENCE

L14131GH55

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
CATHODERAY

Fourteen-centimeter split-beam storage instrument CRT with electrostatic focusing and deflection. Its storage/display system combines multiple-beam presentation with persistent electronic information retention.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	14
NOMINAL HEATER	6.3 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.**14 cm split-beam storage instrument cathode-ray tube*

14 cm split-beam storage instrument cathode-ray tube. The supplied Philips sheet specifies electrostatic focusing and deflection, storage/display characteristics, heater data, capacitances, operating voltages, deflection coefficients, and limiting values.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1999 Philips E-Z

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

1999 PHILIPS E-Z

Section 1 · Cathode Ray

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
INSTRUMENT CATHODE-RAY TUBE	14 cm	—
Final accelerator voltage Vg10 (%)	8.56 kV	—
Useful scan {10 x 8 divisions of [1]}	9 mm	—
Useful scan {10 x 8 divisions of [2]}	90x 72 mm	—
horizontal	9.5 V	—
vertical, system 1	8.5 V	—
vertical, system 2	8.5 V	—
Writing speed	1.25 div/μs	—
Useful screen dimensions min	90x 72 mm	—
horizontal min	90 mm	—
vertical (each system) min	72 mm	—
in horizontal direction max	6 mm	—
in vertical direction max	9 mm	—
Heater voltage	63 V	—
Heater current	300 mA	—
Net mass approx	1.1 kg	—
Overall length (socket included) max	445 mm	—
Face dimensions] max	100 x 120 mm	—
than	3 mm	—
(2) Minimum length of cable	420 mm	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
©@p°	9 s	—
00go	1 s	—
_f040 sub-division	1.8 mm	—
line width	0.15 mm	—
Fig. 6 Detail of side contact. dot diameter	0.3 mm	—
vertical min	72 mm	—
Deflection coefficient	9.5 V	—
max	10.6 V	—
horizontal	8.5 V	—
max	9.6 V	—
vertical, system 1	85 V	—
max	95 V	—
Line width at the centre of the screen	0.4 mm	—
Grid drive for	5 µA	—
positive Vs, Vg max	125 V	—
fr max	125 V	—
negative -Vg1l, -Vg1" max	200 V	—
must be capable of supplying	0.6 mA	—
HT supply →-!:I-I-':l— +vgwm terminal	500 pF	—
conditions, adjusted for optimum spot size at a beam current I	5 µA	—
approx	1.25 div/µs	—
9. A graticule, consisting of concentric rectangles of [1]	88 mm	—
9. A graticule, consisting of concentric rectangles of [2]	70 mm	—
9. A graticule, consisting of concentric rectangles of [3]	84.8 mm	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
9. A graticule, consisting of concentric rectangles of [4]	67.6 mm	—
electrode. The pulse amplitude required is approximately [1]	9 V	—
electrode. The pulse amplitude required is approximately [2]	156 V	—
for about	100 ms	—
should first be connected to the collector electrode voltage and then returned to its original potential	300 ms	—
For non-store operation, it is sufficient to make the backing electrode about	35 V	—
a. Adjust the cathode current of each viewing gun to	0.4 mA	—
is tolerated. To erase to “‘just black’” the amplitude of this pulse is approximately	9 V	—
This voltage will be approximately	80 V	—
voltage will be approximately	80 V	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
x1 to all other elements except x2 Cx1(x2)	6.5 pF	—
x2 to all other elements except x4 Cx2(x1)	6.5 pF	—
X1 toxg Cx1 x2	25 pF	—
Cyryz	0.6 pF	—
Cyly2”	0.6 pF	—
g1 to all other elements Cg1	55 pF	—
k to all other elements Ck	4.5 pF	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
g1' to all other elements Cg1	5.5 pF	—
g1 to all other elements Cg1"	55 pF	—
g7 to all other elements Cg7	45 pF	—
gg to all other elements Cgg	75 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
max	9500 V	—
Final accelerator voltage Vg10(®) min	7000 V	—
Geometry control electrode voltage VgS max	2100 V	—
Deflection plate shield voltage Vg5 max	2000 V	—
max	2100 V	—
Astigmatism control electrode voltage Vg4 min	1200 V	—
Focusing electrode voltage Vg3 max	1000 V	—
max	2000 V	—
First accelerator voltage Vg2 min	1250 V	—
positive Vs max	126 V	—
negative –Vis max	126 V	—
and any deflection plate Vg4/x max	500 V	—
Average grid drive max	30 V	—
min. 8000	5500 V	—
Backing electrode voltage, max	5 V	—
max	50 V	—
non-storage operation –Vg9 min	25 V	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
The current required under typical operating conditions without a mu-metal shield being used is max.	20 mA	—
means that a current of max [1]	12.5 mA	—
means that a current of max [2]	12 V	—
supply when the coils are connected in series or a	6 V	—
With L3 and L4 connected in series according to Fig	11 A	—

TUBE TINKER

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

[Catalog](#) [Tube types](#) [Full books](#) [Blog](#) [Feedback & corrections](#)

© 2026 Tube Tinker