



ELECTRONIC TUBE REFERENCE

DB736

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
CATHODERAY

Philips blue short-persistence cathode-ray instrument tube with electrostatic deflection, 6.3 V heater, approximately 68 mm useful scan, and fine-line characteristics for oscillographic display.

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	
MAXIMUM PLATE VOLTAGE	1500 V
<i>Electrostatic focusing/deflection CRT section; electrical/screen/deflection data retained in parameter rows.</i>	

The Philips DB736 is a high-sensitivity oscilloscope crt with blue, short persistence.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1957 Philips Receiving and Amplifying Tubes

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

1957 PHILIPS RECEIVING AND AMPLIFYING TUBES

Section 1 · Cathode Ray

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.3 V	—
Heater Current	300 mA	—
Phosphor Variant	blue, short persistence text	Screen fluorescence and persistence



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.

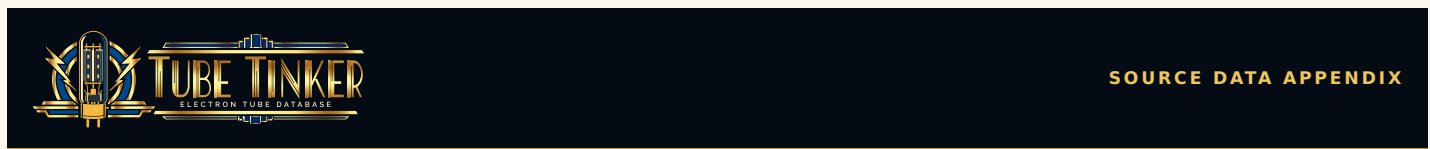
1963 PHILIPS ELECTRON TUBES HANDBOOK V2

Section 1 · Cathode Ray

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage y_c	6.3 V	Heater voltage y_c = 6.3 V
Heater current I_f	300 mA	Heater current I_f = 0.3 A
Grid No	5.7 pF	Grid No. 1 to all other electrodes C_{g1} = 5.7 pF
Cathode to all other electrodes CE	3.3 pF	Cathode to all other electrodes C_E = 3.3 pF
LINE WIDTH measured on a circle of	50 mm	LINE WIDTH measured on a circle of 50 mm diameter

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Beam current Ij	0.5 uA	Beam current Ij = 0.5 μA
Line width	0.4 mm	Line width = 0.4 mm
Negative grid No	1 V	Negative grid No.1 voltage for
Grid No	1 V	Grid No.1 voltage
cathode V _{kf}	180 V	cathode V _{kf} 180 V
Negative grid No	1 V	Negative grid No.1 voltage per kV of
focused spot -V _g	27–53 V	focused spot -V _{g1} 27-53 V V82.44

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Deflection factor	24.5–30 V	Deflection factor 4x plates Mx = 24.5-30.0 V/cm



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

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Chauffage: indirect par C.A. ou C.C. Ve	6.3 V	Published datasheet condition
alimentation parallele If	300 mA	Published datasheet condition
Chauffage: Indirect par C.4. ou C.C. Ve	6.3 V	Published datasheet condition
Heizung: indirekt durch Wechsel- Ir	300 mA	Published datasheet condition
Heater voltage Vr	6.3 V	Published datasheet condition
Heater current Ir	300 mA	Published datasheet condition
Grid No. 1 to all other electrodes Cg1	5.7 pF	Published datasheet condition
except yp plate Cy	4.7 pF	Published datasheet condition
yl plate Cys	4.7 pF	Published datasheet condition

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
x1 plate to x2 plate Cxy~xp	1.9 pF	Published datasheet condition
Cay = 6,6 f	1 pF	Published datasheet condition
Cay = 6,6 f 1.0 pF) [= 2,0	0.3 pF	Published datasheet condition
Ck = 4,0 f 0,6 pP' CD,yDot = 2,6 *	0.4 pF	Published datasheet condition
Cpy, = 5.8 f	0.9 pF	Published datasheet condition
Cpy, = 5.8 f 0,9 pFZ) CDy Di'- D2 D2 = 0,3	0.1 pF	Published datasheet condition
Cpyt = 5.8 f	0.9 pF	Published datasheet condition
Cp, = 6.0 f 0,9 sz) Ck-D1Di' DeDet = 2,55 &	0.15 pF	Published datasheet condition
Dt = 6,0 f	0.9 pF	Published datasheet condition
Line width (V(gpiga)	1500 V	Published datasheet condition
Epaisseur de la ligne (I%Q 54)2 0,5 uh)	0.4 mm	Published datasheet condition
Viga+ge)	1500 V	Published datasheet condition
Vas = 247	397 V	Published datasheet condition
~Vg = 40	-8 V	Published datasheet condition
2,0%	0.3 pF	Published datasheet condition
Ck = 4,0 f	0.6 pF	Published datasheet condition
Ck = 4,0 f 0,6 pF) CDa D2' = 2,6 *	0.4 pF	Published datasheet condition
cp, = 5,8 f 0,9 sz) CD Di'- D2 D2 = 0,3	0.1 pF	Published datasheet condition
Cp,t = 5.8 f	0.9 pF	Published datasheet condition
Cp,t = 5.8 f 0,9 pF) Cg.-Di: D! D2 D2 0,2 f	0.1 pF	Published datasheet condition
0, = 6.0 f 0,9 pE°) Ciopipytpede = 0,35 *	0.15 pF	Published datasheet condition
CDe* = 6,0	0.9 pF	Published datasheet condition
Line width { V(garga)	1500 V	Published datasheet condition
Epaisseur de la ligne (I(& & = 0,5 uA)	0.4 mm	Published datasheet condition
Betriebsdaten V(gzsgs) R	1500 v	Published datasheet condition
Ves = 247	397 v	Published datasheet condition

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
-Vg1 = 49	80 v	Published datasheet condition
Cgl = 5.7 DF) CD2	6 pF	Published datasheet condition
Ck	3.3 pF	Published datasheet condition
Ck = 3,3 pF ') Cpet	6 pF	Published datasheet condition
CD1	4.7 pF	Published datasheet condition
Published value	1.7 pF	Published datasheet condition
CD1'	4.7 pF	Published datasheet condition
CD1'= 4,7 pF) Cpep2'	1.9 pF	Published datasheet condition
Epaisseur de la ligne	5 V	Published datasheet condition
Epaisseur de la ligne 5V52'54	1500 v	Published datasheet condition
Vg2, g4	1500 v	Published datasheet condition
Ve3 = 247	397 V	Published datasheet condition
~Vg1 = 40	80 V	Published datasheet condition
N1 = 0,49	-0.59 mm	Published datasheet condition
plates and grids No	2 a	Published datasheet condition
LINE WIDTH measured on a circle of	50 mm	Published datasheet condition
Grids No	2 a	Published datasheet condition
Grids No.2 and	4 v	Published datasheet condition
Grids No.2 and 4 voltage Vgs,gq	1500 V	Published datasheet condition
Line width	0.4 mm	Published datasheet condition
will be within a circle of	4 mm	Published datasheet condition
Grids No.2 and 4 voltage Veo,g4	1500 V	Published datasheet condition
Grid No	3 v	Published datasheet condition
Grid No.3 voltage Vgz = 247	-397 v	Published datasheet condition
Negative grid No	1 v	Published datasheet condition
spot -Vgy = 40	-80 V	Published datasheet condition
Deflection factor ¥ PLates lx = 24.5	-30 V	Published datasheet condition
ly plates My = 17.0	-20.5 V	Published datasheet condition

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
J) For calculation of the grid No	3 v	Published datasheet condition
$_5' = 27$	53 V	Published datasheet condition
Fagtour dedevlation (p,n,)= 1,2	20 V	Published datasheet condition
tion plates and grid	2 a	Published datasheet condition

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
')	57 mm	Published datasheet condition
Nitzlicher Abtastungsereich (DeDz')	68 mm	Published datasheet condition
Gamme d'exploration utile (D'D1:)	57 mm	Published datasheet condition
Useful scan ¥ plates = min.,	68 mm	Published datasheet condition
¥ plates	57 mm	Published datasheet condition
V(gz4ge)	2500 V	Published datasheet condition
V(gzsge)	1000 V	Published datasheet condition
Vg3 = max,	1000 V	Published datasheet condition
-Vg,	200 V	Published datasheet condition
Published value	2 V	Published datasheet condition
Vkr	180 V	Published datasheet condition
W(gasge)	6 W	Published datasheet condition
Rp	5 MΩ	Published datasheet condition
V(gz+gs)	2500 V	Published datasheet condition
V(g2+g4) = min.,	1000 V	Published datasheet condition
Ves	1000 V	Published datasheet condition
-Vg, = max,.,	200 V	Published datasheet condition

TUBE TINKER

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