ELECTRONIC TUBE REFERENCE

Q13110GU

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
CATHODERAY

Philips flying-spot scanner tube designed for high-resolution optical scanning with magnetic focusing and deflection. Its beam produces a controlled moving light spot rather than serving primarily as a direct-view display.

General characteristics

BASE DESIGNATION	—	**BASE PINS**	—
NOMINAL HEATER	6.3 V / 300 mA	**PARALLEL HEATER**	— / —
HEATING	Indirect	**SERIES OPERATION**	Capable
CATHODE ARRANGEMENT	Separate cathodes	**SECTION CONSTRUCTION**	Similar

Section ratings

SECTION1 Cathode Ray

No fixed ratings recorded.

Published section data from supplied datasheet.

FLYING SPOT SCANNER TUBE Intended for flying-spot scanning service with magnetic focusing and deflection.

SOURCE OPERATING CONDITIONS

1999 Philips E-Z

SOURCE PDF

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

OTHER		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Accelerator voltage	**25 kV**	Accelerator voltage 25 kV
Resolution	**1000 lines**	Resolution 1000 lines
Heater voltage Vi	**6.3 V**	Heater voltage Vi 6,3 V
Heater current I¢	**300 mA**	Heater current I¢ 300 mA
Grid No.l to all other electrodes Cgi	**6.5 pF**	Grid No.l to all other electrodes Cgi 6,5 pF
Cathode to all other electrodes Ck	**6.5 pF**	Cathode to all other electrodes Ck 6,5 pF
Accelerator voltage Vga(2)	**25 kV**	Accelerator voltage Vga(2) 25 kV
Negative grid No. 1 cut-off voltage -Vg1(I1g=0) 350to	**100 V**	Negative grid No. 1 cut-off voltage -Vg1(I1g=0) 350to 100 V
Resolution at centre of screen better than	**1000 lines**	Resolution at centre of screen better than 1000 lines
Accelerator voltage Vgz(fi) min	**20 KV**	Accelerator voltage Vgz(fi) min 20 KV
cathode negative Vs (k neg.) max	**125 V**	cathode negative Vs (k neg.) max. 125 V
cathode positive Vi (k pos.) max	**200 V**	cathode positive Vi (k pos.) max. 200 V
peak value, cathode positive kap(k pos.) max	**410 V**	peak value, cathode positive kap(k pos.) max. 410 V 2)
and cathode Rif max	**1 MΩ**	and cathode Rif max. 1 MQ
External grid No.l resistance Rgl max	**1.5 MΩ**	External grid No.l resistance Rgl max. 1.5 MQ
frequency of	**50 Hz**	frequency of 50 Hz Zg1 (f=50 Hz) max. 0.5 MQ
frequency of 50 Hz Zg1 (f	**50 Hz**	frequency of 50 Hz Zg1 (f=50 Hz) max. 0.5 MQ

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
frequency of 50 Hz Zg1 (f=50 Hz) max	**0.5 MΩ**	frequency of 50 Hz Zg1 (f=50 Hz) max. 0.5 MQ
During a heating-up period not exceeding	**45 sec**	2) During a heating-up period not exceeding 45 sec.

Tube Tinker

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

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