

ELECTRONIC TUBE REFERENCE

5854

Specialized - Photo Tube electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
CAMERAPICKUP

Image-iconoscope television camera tube using magnetic focusing and deflection for optical image pickup.

GENERAL CHARACTERISTICS

BASE DESIGNATION	1AK4	BASE PINS	–
NOMINAL HEATER	6.3 V / 630 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 CameraPickup	
PLATE RESISTANCE	350000 Ω
TRANSCONDUCTANCE	0.00055 S
MAXIMUM PLATE VOLTAGE	50 V
MAXIMUM SCREEN VOLTAGE	50 V
Image iconoscope television camera tube with magnetic focusing and deflection.	

The Philips 5854 is an image iconoscope television camera tube with magnetic focusing and deflection.



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 · CameraPickup

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Photocathode Image Width	12 mm	—
Photocathode Image Height	16 mm	—
Electron-Optical Image Width	4 mm	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

195X General Electric Essential Characteristics

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

195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

Section 1 · CameraPickup

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	45 V	ClassA
Screen voltage	45 V	ClassA
Control-grid voltage	-2 V	ClassA
Plate current	0.8 mA	ClassA
Screen current	0.25 mA	ClassA
Load resistance	50000 Ω	ClassA

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Power output	0.0095 W	ClassA

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	350000 Ω	ClassA
Transconductance	550 μS	ClassA



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 · CameraPickup

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	—
Heater current	630 mA	—
Focusing and deflection method	Magnetic	—
Grid-2/collector/signal-electrode voltage	930 V	—
Maximum grid-1 bias magnitude	—100 V	—
Maximum grid-2/collector/signal-electrode voltage	—1110 V	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid capacitance	—8 pF	Maximum
Cathode capacitance	—10 pF	Maximum
Signal-electrode capacitance	—5 pF	Maximum

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 · CameraPickup

CHARACTERISTICS

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	—
Heater current	630 mA	—

CONSTRUCTION

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Focusing method	Magnetic	—
Deflection method	Magnetic	—

CAPACITANCE

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid capacitance maximum	8 pF	—
Signal-electrode capacitance maximum	10 pF	—
Plate-grid capacitance maximum	5 pF	—

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Operating electrode voltage	930 V	—
Maximum scanning-electrode voltage	1110 V	—
Maximum photocathode illumination	400 lux	—

TUBE TINKER

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

