

ELECTRONIC TUBE REFERENCE

AW5389

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
CATHODERAY

European rectangular monochrome television picture tube with electrostatic focusing, magnetic deflection, and a metal-backed or aluminized screen. Manufacturer documentation supports high-voltage direct-view receiver service with compact wide-angle geometry.

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	20000 V
CRT-specific electrical, optical, deflection, focusing, capacitance, and mechanical data are retained in TUBE_SECTION_PARAMETER because the locked promoted fields primarily target conventional electrode sections.	

21-inch rectangular grey-glass television CRT with electrostatic focus and 110-degree deflection.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Mullard

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

1963 MULLARD

Section 1 · Cathode Ray

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Focusing method	Electrostatic	—
Deflection method	Magnetic	—
Deflection angle	110 deg	—
Light transmission	75 %	—
Grid cutoff range	-35 to -75 V	—
Cathode cutoff range	35 to 69 V	—

CONSTRUCTION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Screen construction	Metal-backed	—

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	Direct-view television / radar display	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Focus-electrode control range	0 to 400 V	—
Final-anode voltage maximum	20 kV	—
Heater-cathode voltage maximum cathode negative	125 V	—
Heater-cathode voltage maximum cathode positive	200 V	—
Heater-cathode peak voltage maximum cathode positive	410 V	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater surge voltage maximum	9.5 V rms	SeriesHeater
Grid positive excursion maximum	2 V	—


SOURCE DATA APPENDIX

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

CONSTRUCTION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Screen color	White	TelevisionCRT
Focusing	Electrostatic	TelevisionCRT
Deflection	Double magnetic	TelevisionCRT

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Screen useful dimension	514.5 mm	TelevisionCRT
Final accelerator voltage	16 kV	TelevisionCRT
Grid No.2 voltage	500 V	TelevisionCRT
Heater voltage	6.3 V	TelevisionCRT
Heater current	300 mA	TelevisionCRT


SOURCE DATA APPENDIX

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
Heater-cathode AC component maximum	20 V RMS	—
Maximum grid No.2 voltage	500 V	—

TUBE TINKER

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

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