

ELECTRONIC TUBE REFERENCE

MC616

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
CATHODERAY

High-voltage blue-violet very-short-persistence cathode-ray tube designed for flying-spot scanning, with magnetic focusing and deflection and approximately 25 kV operating voltage.

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	25000 V
CRT-specific optical, focusing, deflection, accelerating-voltage, scan, capacitance, and safety data are retained in TUBE_SECTION_PARAMETER because the locked promoted fields primarily target conventional electrode sections.	

Metal-backed flying-spot scanner CRT with blue-violet very-short-persistence screen, magnetic focusing, and magnetic 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 · Cathode Ray

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	25000 V	—
Typical Anode Voltage	25000 V	—
Maximum Anode Voltage	25000 V	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Focusing Method	Magnetic	—
Deflection Method	Magnetic	—
Screen	Blue-violet, very short 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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	CathodeRay

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater current	300 mA	CathodeRay
Useful screen diameter minimum	57.5 mm	FlyingSpotScanner
Anode and grid No.2 voltage	25 kV	FlyingSpotScanner
Grid No.1 cutoff voltage minimum	40 V	FlyingSpotScanner
Grid No.1 cutoff voltage maximum	90 V	FlyingSpotScanner
Focusing ampere-turns	855 At	FlyingSpotScanner
Beam current minimum	15 µA	FlyingSpotScanner
Beam current maximum	30 µA	FlyingSpotScanner

CONSTRUCTION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Focusing	Magnetic	CathodeRay
Deflection	Magnetic	CathodeRay
Screen color	Blue violet	CathodeRay
Screen persistence	Very short	CathodeRay

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Deflection angle approximately	40 deg	FlyingSpotScanner



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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Useful screen diameter	57.5 mm	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-heater capacitance	6.3 pF	—
Screen persistence	very short	—
Screen colour	blue violet	—

TUBE TINKER

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