



ELECTRONIC TUBE REFERENCE

EAF41

Voltage Radio Detector Converter electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

DIODE-PENTODE

Diode-pentode for receiver RF/IF amplification and detection. The high-resistance pentode provides useful high-frequency gain while the separate diode supplies signal-detection and rectification service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	RIMLOCK	BASE PINS	8
NOMINAL HEATER	6.3 V / 200 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	1200000 Ω
TRANSCONDUCTANCE	0.0018 S
AMPLIFICATION FACTOR	19
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	2 W
MAXIMUM SCREEN DISSIPATION	0.3 W
MAXIMUM CATHODE CURRENT	10 mA
<i>Promoted from clearly identified published ratings/characteristics; additional operating points, capacitances, detector data, microwave data, and special-quality limits are retained in TUBE_SECTION_PARAMETER.</i>	

SECTION2 Diode	
PEAK INVERSE VOLTAGE	350 V
NOMINAL OUTPUT CURRENT	600 mA
PEAK FORWARD CURRENT	5 A
<i>Promoted from clearly identified published ratings/characteristics; additional operating points, capacitances, detector data, microwave data, and special-quality limits are retained in TUBE_SECTION_PARAMETER.</i>	

Diode-pentode with variable transconductance for RF, IF, and AF amplifier service.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Philips Electron Tubes Handbook V1a

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

1963 PHILIPS ELECTRON TUBES HANDBOOK V1A

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	250 V	RFIFAmplifier
Screen voltage	85 V	RFIFAmplifier
Control-grid voltage	-2 V	RFIFAmplifier
Plate current	5 mA	RFIFAmplifier
Screen current	1.6 mA	RFIFAmplifier

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	1800 μ S	Section1
Plate resistance	1200000 Ω	Section1

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate capacitance	6.5 pF	Section1
Grid capacitance	4 pF	Section1
Grid-to-plate capacitance maximum	0.002 pF	Section1

1963 PHILIPS ELECTRON TUBES HANDBOOK V1A

Section 2 · Diode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Diode capacitance	3.8 pF	Section2

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak inverse voltage maximum	350 V	DetectorDiode
Average diode current maximum	0.6 mA	DetectorDiode
Peak diode current maximum	5 mA	DetectorDiode



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 · Pentode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	—
Heater current	200 mA	—
Typical plate voltage	250 V	RFOrIF
Typical plate current	5 mA	RFOrIF
Typical screen current	1.6 mA	RFOrIF
Transconductance	1600 μ S	RFOrIF
Plate resistance	1.2 Mohm	RFOrIF

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate no-current voltage	550 V	—
Maximum plate voltage	300 V	—
Maximum plate dissipation	2 W	—
Maximum screen no-current voltage	550 V	—
Maximum screen dissipation	0.3 W	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate capacitance	6.5 pF	—
Grid input capacitance	4 pF	—
Plate-grid capacitance maximum	0.002 pF	—
Grid-heater capacitance maximum	0.05 pF	—

1999 PHILIPS E-Z

Section 2 · Diode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum diode inverse peak voltage	350 V	—
Maximum diode average current	0.8 mA	—
Maximum diode peak current	5 mA	—