



ELECTRONIC TUBE REFERENCE

E282F

Voltage Pentode electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

PENTODE

High-transconductance broadband power pentode designed for low-distortion output stages in video and oscilloscope amplifiers. It combines substantial load-driving capability with wide frequency response.

GENERAL CHARACTERISTICS

BASE DESIGNATION	Noval	BASE PINS	9
NOMINAL HEATER	6.3 V / 350 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Pentode	
PLATE RESISTANCE	200000 Ω
TRANSCONDUCTANCE	0.026 S
MAXIMUM PLATE VOLTAGE	200 V
MAXIMUM SCREEN VOLTAGE	150 V
MAXIMUM PLATE DISSIPATION	4.2 W
MAXIMUM SCREEN DISSIPATION	1.4 W
MAXIMUM CATHODE CURRENT	50 mA
Published section data promoted where applicable.	

High-transconductance broadband power pentode for low-distortion output stages in video and oscilloscope amplifiers.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Siemens

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

1963 SIEMENS

Section 1 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical Plate Voltage	125 V	PentodeConnection
Typical Screen Voltage	125 V	PentodeConnection
Typical Plate Current	35 mA	PentodeConnection



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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage Vg	6.3 V	Heating
Heater current If	350 mA	Heating
Anode current Iy	35 mA	Heating
Mutual conductance S	26 mA	Heating
Noise factor at	100 MHz	Heating
Heater voltage Vs	6.3 v	Characteristics
Heater current I	350 mA	Characteristics
and heater It max	5 uA	Characteristics
Anode voltage Vag, max	400 V	Limiting Values

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode dissipation W, max	4.2 W	Limiting Values
Grid No.2 voltage Vg20 max	2 V	Limiting Values
Grid No.2 dissipation l) Wg2 max	2 W	Limiting Values
Cathode current Ik max	50 mA	Limiting Values
Voltage between cathode and heater Vit max	100 V	Limiting Values
Heater voltage: The average heater voltage should be	6.3 V	Limiting Values
by more than	10 a	Limiting Values
Maximum plate voltage	400 V	Promoted published datasheet value
Maximum screen voltage	400 V	Promoted published datasheet value
Maximum plate dissipation	4.2 W	Promoted published datasheet value
Maximum screen dissipation	1.4 W	Promoted published datasheet value

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode supply voltage Vba	125 v	Characteristics
Grid No	2 v	Characteristics
Grid No.3 voltage Vg3	3 mA	Characteristics
Grid No.1 supply voltage +Vbg	1 v	Characteristics
Cathode resistor Ry	300 Ω	Characteristics
Anode current Iy	33–37 mA	Characteristics
Grid No.2 current Ig2	1119.9–12.1 mA	Characteristics
Mutual conductance S	22–30 mA	Characteristics
Equivalent noise resistance Req	200 Ω	Characteristics
Noise factor at	100 MHz	Characteristics
Negative grid current –Igl max	0.3 uA	Characteristics
Anode supply voltage Vba	135 v	Characteristics
Grid No.2 supply voltage Vbg2	2 v	Characteristics
Grid No.3 voltage Vg3	3 v	Characteristics

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No.1 supply voltage +Vbgl	1 v	Characteristics
Cathode resistor Rg	360 Ω	Characteristics
Anode current Iy	30 mA	Characteristics
Grid No.2 current Igz	2 mA	Characteristics
Mutual conductance S	25 mA	Characteristics
Grid No.3 supply voltage Vbg3	3 v	Characteristics
Cathode resistor Rk	350 Ω	Characteristics
Anode current Iy	40 mA	Characteristics
Mutual conductance S	32 mA	Characteristics
Equivalent noise resistance Req	100 Ω	Characteristics
Anode to other electrodes (V =	300 V	Characteristics
Grid No.1 to other electrodes (V =	1 V	Characteristics
Plate resistance	800 Ω	Promoted published datasheet value
Transconductance	26000 μS	Promoted published datasheet value
Amplification factor	27	Promoted published datasheet value

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
cathode, heater and screen Cgl/gzgslds	10 pF	Capacitances
cathode, heater and screen Cgl /828	828 pF	Capacitances
Cathode current Iy =	46 mA	Capacitances
cathode, heater and screen Ca/g2g3kfs	2 pF	Capacitances
Anode to grid No.1 Cag	1 mpF	Capacitances
Anode to cathode Cak max	50 mpF	Capacitances
Cathode to heater Cke	4.7 pF	Capacitances
Grid No.1 to heater Cg if max	1 mpF	Capacitances