



ELECTRONIC TUBE REFERENCE

PE0525

Power - Pentode (NOT beam) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
PENTODE

Power pentode designed for RF transmitting, linear RF amplification, oscillation, modulation, or RF/LF power-amplifier service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	12.6 V / 700 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Pentode	
TRANSCONDUCTANCE	0.0033 S
AMPLIFICATION FACTOR	7.6
MAXIMUM PLATE VOLTAGE	500 V
MAXIMUM SCREEN VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	12 W
MAXIMUM SCREEN DISSIPATION	5 W
MAXIMUM CATHODE CURRENT	130 mA
Promoted where the locked schema directly matches published RF values; frequency/service-specific limits and operating conditions are retained as parameter rows.	

Indirectly heated pentode for RF/LF amplification and oscillator service.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Philips Electron Tubes Handbook V4

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

1963 PHILIPS ELECTRON TUBES HANDBOOK V4

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	500 V	RFPowerTube
Maximum screen voltage	300 V	RFPowerTube
Application	Indirectly heated pentode for RF/LF amplification and oscillator service.	SourceDescription
Service category	RF/AF power service as specified in source	RFPowerTube
Heater/filament voltage	12.6 V	RFPowerTube
Heater/filament current	700 mA	RFPowerTube
Plate voltage	500 V	RFPowerAmplifier
Plate current	90 mA	RFPowerAmplifier

CONSTRUCTION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heating method	Indirect	RFPowerTube
Device class	Pentode	RFPowerTube

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	3300 μ S	RFPowerTube

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate capacitance	7.8 pF	RFPowerTube
Control-grid capacitance	14.5 pF	RFPowerTube

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

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Capacitances Ca	7.8 pF	—
Kapazitéten Cagl	0.15 pF	—
Kenndaten 5 (Ta=30 mi)	3.3 mA/V	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Va = max	500 V	—
Wa = max, [1]	12 W	—
Wa = max, [2]	100 kΩ	—
Vg2 = max, [1]	300 V	—
Vg2 = max, [2]	130 mA	—
Wg2 = max, [1]	5 W	—
Wg2 = max, [2]	800 mA	—
Wgl = mex [1]	0.5 W	—
Wgl = mex [2]	75 V	—
Va = 500	400 V	ClassB
Vg2 = 250	250 V	—
Vg3 = 0	0 V	—
Ia = 36	42.5 mA	—
Va = 400	300 V	ClassC
Vg1 = =80	80 V	ClassC
Vge = 200	200 V	ClassC
Ig = 70	71 nA	ClassC
Va = 400 400	400 V	ClassC
Vg1 = -175 =200	250 V	ClassC
Vg2 = 250 250	250 V	ClassC
Ia = 47 50	52.5 mA	ClassC
Vg1 = 24	-18.5 V	ClassB;TwoTubes
Vg2 = 250	200 V	ClassB;TwoTubes
Vglgip = "o 70 0 g	2 V	ClassB;TwoTubes

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Ig2 = 3	3.5 mA	—
Vgip = 17,5	21.25 V	—
Wgo = 0,75	0.9 W	—
Wa = 18	17 W	—
Wa = 12	11.6 W	—
Wo = 6 5+	4 W	—
Ig'l = 2	3.4 mA	—
Vigl = 0,07	0.13 W	—
Ig1 = 2,5	3.5 mA	—
Igo	4.5 mA	—
Vgip = 100	105 V	—
Wigi = 0,25	0.35 W	—
Wig = 28	23 W	—
Vg = 8	17 W	—
W = 20	16 W	—
Vg2p = 190	190 V	—
W¥mod = 15	13 W	—
Igt = 0,9 1	152 mA	—
Igz = 2 2,5	3 mA	—
Vgip = 200 220	270 V	—
Wigl = 0,16 0.2	0.3 W	—
Vg2 = 0,5 0,65 C,	75 W	—
Wig = 18,8 20	21 W	—
Wa = 12 12	1 W	—
Wa = 6,8 8	9 W	—
Ila = 2x18 2x71 2x1% 2x	89 mA	TwoTubes
Ig1 = o} 2x1,8 0 2x	4.4 mA	—
Iz2z = 2x0,6 2x11,2 2x0,5 2x	10.5 mA	—
Wigi = 0 2x57 0 2x	165 mW	—
Wg2 2x0,18% 2x2,8 2x0,1 2x	2.1 W	—
Wia = 2x9 2x35,5 2x6 2x	35.5 W	—
Wo = 0 19 0	49 W	—
Vg1	-18 V	—
Vg2	200 V	—
Vg3	0 V	—
Vgiglp = 0	100 V	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Ia = 2x15 2x	108 mA	—
Ig1 [ç] 2x	6 mA	—
Ig2 = 2x0,5 2x	13 mA	—
wig'l = [ç] 2x	270 mW	—
Vg2 = 2x0,1 2x	2.6 W	—
Wia = 2x4,5 2x	32.5 W	—
Wa = 2x4,5 2x	12.5 W	—
Yo = 0	40 W	—
(A Vgs	0 V	—
Iyt Vg2	200 V	—
MmAF [1]	1 A	—
MmAF [2]	0 V	—
20 B	0 mA	—
EEEmas Vpa	250 V	—
Vez	0 V	—
03AfRAR Ao B	0 mA	—
§nh) Vyo	250 V	—
Vgz	0 V	—
20 lh2	250 V	—
Vgr==	28 V	—
200y ==	28 V	—
V3	0 V	—
40y,	500 V	—
BE '(7' ==	24 V	—

TUBE TINKER

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and their source documents.

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