



ELECTRONIC TUBE REFERENCE

EK1

Voltage - Radio Detector Converter electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

OCTODE

Radio receiver frequency changer combining oscillator and mixer functions for superheterodyne conversion. Its multi-grid construction translates incoming RF signals to the intermediate frequency within the receiver front end.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / 200 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Octode	
MAXIMUM PLATE VOLTAGE	400 V
MAXIMUM SCREEN VOLTAGE	400 V
MAXIMUM SCREEN DISSIPATION	0.3 W
MAXIMUM CATHODE CURRENT	10 mA
<i>Octode frequency-converter tube</i>	

Indirectly heated octode frequency-converter tube for radio receiver mixer service, with oscillator/mixer operating conditions, capacitances, conversion characteristics, and limiting values.

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 · Octode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heizung ind. Vf	6.3 V	—
Ri (Vg4	-25 V	—
Ig (3 + 5) min [1]	2.3 mA	—
Ig (3 + 5) min [2]	10 mA	—
Ig (3 + 5) max [1]	5.2 mA	—
Ig (3 + 5) max [2]	20000 Ohm	—
Wg (3 + 5) max = 0 [1]	5 W	—
Wg (3 + 5) max = 0 [2]	50 V	—
Rg4 max	2 Megohm	—
Vg4 (Ig4 = 0,3 µ A) max	-1.3 V	—
•) Oszillatorspannung zirka) 46) Ra	0.5 Megohm	—
Tension d'oscillateur env. }	8.5 V	—
Für die richtige Oszillatorspannung muss der Strom durch R5	190 µA	—
courant de	190 MA	—
Va [1]	250 V	—
Va [2]	90 V	—
Va [3]	70 V	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Va	250 V	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Vg3+S	70 V	—
Vgl - •	1.5 V	—
Ja (Vg4 [1])	-1.5 V	—
Ja (Vg4 [2])	1.6 mA	—
Sc (Ia [1])	1.6 mA	—
Sc (Ia [2])	6 mA	—
Sc (Vg4	-25 V	—
Ri (Ia	1.6 mA	—
Vao max [1]	400 V	—
Vao max [2]	400 V	—
VaR max [1]	250 V	—
VaR max [2]	90 V	—
VaL max [1]	20 V	—
VaL max [2]	2 mA	—
a'a max [1]	0.5 W	—
a'a max [2]	1.3 mA	—
Vg (3 + 5)0 max = 400V Ig2 max	3 mA	—
Vg (3 + 5)R max [1]	70 V	—
Vg (3 + 5)R max [2]	0.3 W	—
Ig (3 + 5) [1]	2.8 mA	—
Ig (3 + 5) [2]	100000 Ohm	—

TUBE TINKER

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and their source documents.

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