



ELECTRONIC TUBE REFERENCE

EK3

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 SCREEN VOLTAGE	150 V
<i>Octode mixer tube</i>	

Indirectly heated octode mixer tube for receiver frequency conversion, with mixer operation, oscillator coupling, operating conditions, electrical 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
beim Schwingungseinsatz	4 mA/V	—
sie_etwa	60 Ohm	—
Va	250 V	—
Vgs	25 V	—
bei einem Ableitwiderstand von	50 Ohm	—
bedingen eine griflere, leistungsfihigere – \ Va	250 V	—
Kathode. Deshalb hat die EK3 einen T V2 = s	100 V	—
groBeren Heizstrom als	200 mA	—
einem Heizfaden fiir 200-mA-Serienspeisung 40 LTS s	250 V	—
entwickelt. Vg = l{yz,	100 V	—
Heizspannung Vy	63 V	—
Anodenstrom P	2.5 mA	—
Schirmgitterstrom J;35	55 mA	—
Oszillatoranodenstrom I;z	5 mA	—
Mischsteilheit o .. .8 [1]	650 pA/V	—
Mischsteilheit o .. .8 [2]	6.5 pA/V	—
Vosz = 0) o o . o o o o o .. Sg1g2	4 mA/V	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Schwingungseinsatz (Vo [1])	0 V	—
Schwingungseinsatz (Vo [2])	18 mA	—
Maximale Oszillatoranodenspannung Vg2 = max	150 V	—
Maximale Oszillatoranodenbelastung Wy = max	1 W	—
Oberer Grenzwert des Schirmgitterstroms I3+ I;5 = max	6.6 mA	—
Unterer Grenzwert des Schirmgitterstroms Ig3 + Ig5 = min	4.4 mA	—
Oberer Grenzwert des Oszillatoranodenstroms . . . Ig2 = max	6 mA	—
Unterer Grenzwert des Oszillatoranodenstroms . . . Igz = min	4 mA	—
Maximaler Kathodenstrom .. = max	23 mA	—
Glitterstromelnsatzpunkt des Gxtters 4 .. g4 (1 g4– + [1])	0.3 pA	—
Glitterstromelnsatzpunkt des Gxtters 4 .. g4 (1 g4– + [2])	1.3 V	—
(Gleichspannung oder Effektivwert der Wechseisp.) Vi = max	50 V	—
beträgt (	300 pA	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anodenspannung Ve	250 V	—
Schirmgitterspannung. Vess	100 V	—
Oszillatoranodenspannung. . N	100 V	—
Oszillatorgitterstrom < Iy	300 pA	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Neg. Vorspannung an Gitter 4 Vo = -2,5V1) -	38 V	—
Maximale Anodenkaltspannung Vo = max	550 V	—
Maximale Anodenspannung V, = max	300 V	—
Maximale Anodenbelastung . . . T © = max	1 W	—
Maximale SLhlrmglitterkaltspannung e e Vasse = max	550 V	—
Maximale Schirmgitterspannung. Vg3 = max	150 V	—
Maximale Schirmgitterbelastung. . . c e e W = max	1 W	—
Maximale Oszflatoranodenkaltspannung e e Ve = max	550 V	—

TUBE TINKER

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and their source documents.

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