



ELECTRONIC TUBE REFERENCE

AK2

Voltage - Radio Detector Converter electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

OCTODE

Octode frequency changer for superheterodyne receivers, combining oscillator and mixer action in one multi-grid valve. High output resistance and controllable conversion gain suit automatic gain regulation.

GENERAL CHARACTERISTICS

BASE DESIGNATION	P35	BASE PINS	8
NOMINAL HEATER	4 V / 650 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Octode	
PLATE RESISTANCE	1600000 Ω
TRANSCONDUCTANCE	0.0006 S
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	0.5 W
MAXIMUM SCREEN DISSIPATION	0.3 W
MAXIMUM CATHODE CURRENT	10 mA
Octode mixer/oscillator; canonical TubeType and SectionType lists have no Octode value, so Other is used.	

Telefunken octode frequency changer, intended for the same receiver-mixer applications as AK1.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1938 Philips Miniwatt Vacuum Tube Catalog

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

1938 PHILIPS MINIWATT VACUUM TUBE CATALOG

Section 1 · Octode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	250 V	—
Screen voltage	90 V	—
Screen current	2 mA	—

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Conversion transconductance	600 μS	—
Grid-anode capacitance	0.061 pF	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

195X Tunsgram

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

195X TUNSGRAM

Section 1 · Octode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical oscillator-modulator plate current	1.6 mA	—
Oscillator effective grid voltage	8.5 V	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum no-current anode voltage	550 V	—
Maximum heater-cathode voltage	50 V	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical conversion transconductance	0.0006 A/V	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1999 Philips 0-D

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

1999 PHILIPS 0-D

Section 1 · Octode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	4 V	—
Heater current	650 mA	—
Plate voltage	250 V	—
Screen/auxiliary voltage	90 V	—
Plate current	1.6 mA	—
Screen/auxiliary current	3.8 mA	—
Transconductance	600 μ S	Conversion
Plate resistance	1600000 ohm	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Control-grid to plate capacitance maximum	0.06 pF	—



An independent reference for electronic tubes, vacuum tubes,
and their source documents.

[Catalog](#) [Tube types](#) [Full books](#) [Blog](#) [Feedback & corrections](#)

© 2026 Tube Tinker