



ELECTRONIC TUBE REFERENCE

16AK9

Power - TV Vertical Output electronic tube

CONSOLIDATED TECHNICAL DATA

3 SECTIONS

CONSTRUCTION

BEAMPOWER-TRIODE-TRIODE

Combination tube with two dissimilar triodes and a beam-power section for television vertical-deflection amplifier, oscillator, and sync-clipper functions.

GENERAL CHARACTERISTICS

BASE DESIGNATION	12GZ	BASE PINS	12
NOMINAL HEATER	16.4 V / 600 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	11000 Ω
TRANSCONDUCTANCE	0.0039 S
AMPLIFICATION FACTOR	43
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	1.25 W
Heater-variant reference sheet; electrical data explicitly cross-referenced to 6AK9.	

SECTION2 Triode	
PLATE RESISTANCE	8500 Ω
TRANSCONDUCTANCE	0.00235 S
AMPLIFICATION FACTOR	20
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	1 W
<i>Heater-variant reference sheet; electrical data explicitly cross-referenced to 6AK9.</i>	

SECTION3 Beam Power	
PLATE RESISTANCE	16400 Ω
TRANSCONDUCTANCE	0.0062 S
MAXIMUM PLATE VOLTAGE	350 V
MAXIMUM SCREEN VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	10 W
MAXIMUM SCREEN DISSIPATION	2 W
<i>Heater-variant reference sheet; electrical data explicitly cross-referenced to 6AK9.</i>	

Two dissimilar triodes plus a beam-power section for television vertical-deflection amplifier, oscillator, and sync-clipper service.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1968 General Electric Co

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

1968 GENERAL ELECTRIC CO

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterOrFilamentVoltageNominal	16.4 V	—
HeaterOrFilamentCurrentNominal	600 mA	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1975 RCA RC30

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

1975 RCA RC30

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	150 V	ClassA
Grid No.1 voltage	-2 V	ClassA
Plate current	5.4 mA	ClassA

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate dissipation	1.25 W	—

1975 RCA RC30

Section 2 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	150 V	ClassA
Grid No.1 voltage	-5 V	ClassA
Plate current	5.5 mA	ClassA

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak negative-pulse grid voltage	400 V	VerticalDeflection
Average plate current	20 mA	VerticalDeflection
Peak plate current	70 mA	VerticalDeflection

1975 RCA RC30

Section 3 · Beam Power

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	150 V	ClassA
Screen-grid voltage	150 V	ClassA
Grid No.1 voltage	-14 V	ClassA
Plate current	49 mA	ClassA
Screen-grid current	3.5 mA	ClassA

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak positive-pulse plate voltage	2500 V	VerticalDeflection
Plate dissipation	10 W	VerticalDeflection
Screen-grid input	2 W	VerticalDeflection
Peak plate current	245 mA	VerticalDeflection
Average plate current	80 mA	VerticalDeflection

TUBE TINKER

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

