



ELECTRONIC TUBE REFERENCE

6AK9

Power - TV Vertical Output electronic tube

CONSOLIDATED TECHNICAL DATA

3 SECTIONS

CONSTRUCTION

BEAMPOWER-TRIODE-TRIODE

Multifunction Compactron containing two dissimilar triodes and a beam pentode for television sync clipping, vertical oscillation, and vertical-deflection amplification.

GENERAL CHARACTERISTICS

BASE DESIGNATION	E12-74	BASE PINS	12
NOMINAL HEATER	6.3 V / 1.6 A	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
Triode section 1; sync-clipper service.	

SECTION2 Triode	
PLATE RESISTANCE	8500 Ω
TRANSCONDUCTANCE	0.00235 S
AMPLIFICATION FACTOR	20
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	1 W
PEAK INVERSE VOLTAGE	0.02 V
<i>Triode section 2; vertical oscillator service.</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
MAXIMUM CATHODE CURRENT	80 mA
<i>Beam pentode section; vertical-deflection amplifier service. Peak pulse plate voltage 2500 V retained as parameter.</i>	

The 6AK9 is a multifunction Compactron containing two dissimilar triodes and a beam pentode; the pentode is for vertical-deflection amplification, one triode for vertical oscillation, and one for sync clipping.

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	6.3 V	—
HeaterOrFilamentCurrentNominal	1.6 A	—
Maximum Plate Voltage	330 V	—
Maximum Plate Dissipation	1.25 W	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance	11000 Ohm	—
Transconductance	3900 uS	—
Amplification Factor	43	—

1968 GENERAL ELECTRIC CO

Section 2 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance	8500 Ohm	—
Transconductance	2350 uS	—
Amplification Factor	20	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	330 V	—
Maximum Plate Dissipation	1 W	—
Maximum Peak Inverse Voltage	0.02 V	—
Peak Plate Current	70 mA	VerticalOscillator

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance	16400 Ohm	—
Transconductance	6200 uS	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	350 V	—
Maximum Screen Voltage	250 V	—
Maximum Plate Dissipation	10 W	—
Maximum Screen Dissipation	2 W	—
Maximum Cathode Current	80 mA	—
MaximumPeakPulsePlateVoltage	2500 V	VerticalDeflection
TotalPeakPlateAndScreenCurrent	245 mA	VerticalDeflection

TUBE TINKER

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

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