



ELECTRONIC TUBE REFERENCE

9KX6

Power - Pentode (NOT beam) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
PENTODE

Frame-grid sharp-cutoff pentode specifically for high-current video-output amplification in color and monochrome televisions.

GENERAL CHARACTERISTICS

BASE DESIGNATION	9GK	BASE PINS	9
NOMINAL HEATER	8.7 V / 450 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

9GK - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1	–	K – Cathode	CONNECTED
PIN2	–	G1 – Control Grid	CONNECTED
PIN3	–	G3 – Suppressor Grid	CONNECTED
PIN3	–	IS – Internal Screen	CONNECTED
PIN4	–	H – Heater	CONNECTED
PIN5	–	H – Heater	CONNECTED
PIN6	–	P – Plate (Anode)	CONNECTED
PIN7	–	G2 – Screen Grid	CONNECTED
PIN8	–	G3 – Suppressor Grid	CONNECTED

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	50000 Ω
TRANSCONDUCTANCE	0.036 S
MAXIMUM PLATE VOLTAGE	400 V
MAXIMUM SCREEN VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	11.5 W
MAXIMUM SCREEN DISSIPATION	1.5 W
<i>Published ratings and characteristics extracted from the approved RCA source. Pulse-only ratings remain parameter rows unless explicitly continuous.</i>	

Frame-grid sharp-cutoff pentode for video-output amplification in color and black-and-white television receivers.

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 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
socket. Heater:	8.7 V	Other;PublishedValue1
socket. Heater:	0.45 V	Other;PublishedValue2
time	11 s	Other;PublishedValue1
time	200 s	Other;PublishedValue2
Plate Voltage	400 V	MaximumRating
Grid-No	3 V	MaximumRating;PublishedValue1
Grid-No	0 V	MaximumRating;PublishedValue2
Grid-No	2 V	MaximumRating;PublishedValue1
Grid-No	330 V	MaximumRating;PublishedValue2
Grid-No.1 (Control-Grid) Voltage, Positive value	0 V	MaximumRating
Plate Dissipation	11.5 W	MaximumRating
Grid-No	2 W	MaximumRating;PublishedValue1
Grid-No	1.5 W	MaximumRating;PublishedValue2
Maximum Plate Voltage	400 V	Section1
Maximum Screen Voltage	330 V	Section1
Maximum Plate Dissipation	11.5 W	Section1
Maximum Screen Dissipation	1.5 W	Section1

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	250 V	Characteristic;PublishedValue1
Plate Voltage	50 V	Characteristic;PublishedValue2
Grid-No	2 V	Characteristic;PublishedValue1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-No	150 V	Characteristic;PublishedValue2
Grid-No	125 V	Characteristic;PublishedValue3
Grid-No.1 Voltage	0 V	Characteristic;PublishedValue1
Grid-No.1 Voltage	0 V	Characteristic;PublishedValue2
Cathode-Bias Resistor, Bypassed	56 ohm	Characteristic
Plate Resistance (Approx.)	50000 ohm	Characteristic
Plate Current	28 mA	Characteristic;PublishedValue1
Plate Current	70 mA	Characteristic;PublishedValue2
Grid-No.1 Voltage (Approx.) for plate current	100 V	Characteristic;PublishedValue1
Grid-No.1 Voltage (Approx.) for plate current	-5.7 V	Characteristic;PublishedValue2
Plate Resistance	50000 ohm	Section1
Transconductance	36000 uS	Section1

TUBE TINKER

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

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

© 2026 Tube Tinker