

ELECTRONIC TUBE REFERENCE

12AU5GA

Power - TV Horizontal Output (sweep) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
BEAMPOWER

Beam-power tube for television horizontal-output service in 600 mA series-heater equipment, using a controlled-warm-up 12.6 V heater for reliable line-deflection operation.

GENERAL CHARACTERISTICS

BASE DESIGNATION	6CK	BASE PINS	6
NOMINAL HEATER	12.6 V / 600 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

6CK - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – Pin 1	A	G1 – Control Grid	CONNECTED · verified
PIN2 – Pin 2	–	H – Heater	CONNECTED · verified
PIN3 – Pin 3	A	BP – Beam-Forming Plate	CONNECTED · verified
PIN3 – Pin 3	A	K – Cathode	CONNECTED · verified
PIN5 – Pin 5	A	P – Plate (Anode)	CONNECTED · verified
PIN7 – Pin 7	–	H – Heater	CONNECTED · verified
PIN8 – Pin 8	A	G2 – Screen Grid	CONNECTED · verified

SECTION RATINGS

SECTION1 Beam Power	
PLATE RESISTANCE	14500 Ω
TRANSCONDUCTANCE	0.0059 S
AMPLIFICATION FACTOR	4.3
MAXIMUM PLATE VOLTAGE	550 V
MAXIMUM SCREEN VOLTAGE	175 V
MAXIMUM PLATE DISSIPATION	11 W
MAXIMUM SCREEN DISSIPATION	2.5 W
MAXIMUM CATHODE CURRENT	400 mA
<i>Reference-only sheet; electrical characteristics refer to 6AU5GA. Heater data from supplied 12AU5GA sheet; no unsupported parent ratings guessed.</i>	

12AU5GA is explicitly specified as the 12.6-volt controlled-warm-up heater version of 6AU5GA; the supplied sheet provides heater data and refers all other ratings to the parent type.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1971 RCA HB3 Binder 5 of 7

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

1971 RCA HB3 BINDER 5 OF 7

Section 1 · Beam Power

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage nominal	12.6 V	—
Heater current	600 mA	—
Heater warm-up time	11 s	Average



SOURCE OPERATING CONDITIONS

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 · Beam Power

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	0.5 pF	Grid to plate capacitance; RCA 12AV5GA equivalence, RC26/RC30
Input capacitance	14 pF	Input capacitance; RCA 12AV5GA equivalence, RC26/RC30
Output capacitance	7 pF	Output capacitance; RCA 12AV5GA equivalence, RC26/RC30

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak positive pulse plate voltage	5500 V	Peak positive pulse plate voltage; RCA 12AV5GA equivalence, RC26/RC30

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak negative pulse plate voltage	-1250 V	Peak negative pulse plate voltage; RCA 12AV5GA equivalence, RC26/RC30
Average cathode current	110 mA	Maximum average cathode current; RCA 12AV5GA equivalence, RC26/RC30
Peak negative grid #1 voltage	-300 V	Peak negative control grid voltage; RCA 12AV5GA equivalence, RC26/RC30
For grid bias feedback HV regulation	0.47 MOhm	Maximum grid 1 circuit resistance; RCA 12AV5GA equivalence, RC26/RC30
Bulb Temperature (At hottest point)	210 degC	Maximum bulb temperature; RCA 12AV5GA equivalence, RC26/RC30
Plate voltage	250 V	Typical plate voltage; RCA 12AV5GA equivalence, RC26/RC30
Grid #2 voltage	150 V	Typical screen voltage; RCA 12AV5GA equivalence, RC26/RC30
Grid #1 voltage	-22.5 V	Typical control grid voltage; RCA 12AV5GA equivalence, RC26/RC30
Plate current	57 mA	Typical plate current; RCA 12AV5GA equivalence, RC26/RC30
Grid #2 current	2.1 mA	Typical screen current; RCA 12AV5GA equivalence, RC26/RC30
Grid #1 voltage	-43 V	Grid cutoff for Ib=1mA; RCA 12AV5GA equivalence, RC26/RC30
Plate voltage	60 V	Instantaneous knee plate voltage; RCA 12AV5GA equivalence, RC26/RC30
Plate current	260 mA	Instantaneous knee plate current; RCA 12AV5GA equivalence, RC26/RC30
Grid #2 current	26 mA	Instantaneous knee screen current; RCA 12AV5GA equivalence, RC26/RC30
Peak Heater-Cathode Voltage	200 V	Heater-cathode peak voltage, both polarities; RCA 12AV5GA equivalence, RC26/RC30
Peak Heater-Cathode Voltage	100 V	Heater-cathode average maximum; RCA 12AV5GA equivalence, RC26/RC30

TUBE TINKER

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