

ELECTRONIC TUBE REFERENCE

17AV5GA

Power - TV Horizontal Output (sweep) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
BEAMPOWER

An octal-base beam-power pentode intended for television horizontal-deflection amplifier service. Equipped with a 16.8-volt, 450-milliampere controlled-warm-up heater, it combines high-voltage pulse tolerance with efficient output characteristics and an 11-watt plate-dissipation rating for color television sweep circuits.

GENERAL CHARACTERISTICS

BASE DESIGNATION	6CK	BASE PINS	6
NOMINAL HEATER	16.8 V / 450 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

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1970 Sylvania Technical Manual

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

1970 SYLVANIA TECHNICAL MANUAL

Section 1 · Beam Power

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	250 V	—
Screen Voltage	150 V	—
Grid Bias	-22.5 V	—
Plate Current	57 mA	—
Screen Current	2.1 mA	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak positive pulse plate voltage	5500 V	peak positive plate voltage; manufacturer datasheet
Peak negative pulse plate voltage	-1250 V	peak negative plate voltage; manufacturer datasheet
Average cathode current	110 mA	average cathode current maximum; manufacturer datasheet
Peak cathode current	400 mA	peak cathode current maximum; manufacturer datasheet
Heater warm-up time	11 s	heater warmup; Sylvania 1970
Grid #1 voltage	-43 V	grid cutoff at plate current 1mA; Sylvania 1970
Plate voltage	60 V	knee plate voltage; Sylvania 1970
Plate current	260 mA	knee plate current; Sylvania 1970
Grid #2 current	26 mA	knee screen current; Sylvania 1970
Plate voltage	250 V	typical plate voltage; Sylvania 1970
Grid #2 voltage	150 V	typical screen voltage; Sylvania 1970
Grid #1 voltage	-22.5 V	typical grid voltage; Sylvania 1970
Plate current	57 mA	typical plate current; Sylvania 1970

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid #2 current	2.1 mA	typical screen current; Sylvania 1970

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	0.5 pF	grid plate capacitance; manufacturer datasheet
Input capacitance	14 pF	input capacitance; manufacturer datasheet
Output capacitance	7 pF	output capacitance; Sylvania 1970