

ELECTRONIC TUBE REFERENCE

20LF6

Power - TV Horizontal Output (sweep) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
BEAMPOWER

Beam-power tube designed for television horizontal-deflection or power-amplifier service, with ratings suited to high-energy sweep operation.

GENERAL CHARACTERISTICS

BASE DESIGNATION	12GW	BASE PINS	12
NOMINAL HEATER	20 V / 600 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

12GW - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1	–	H – Heater	CONNECTED
PIN2	–	K – Cathode	CONNECTED
PIN3	–	G2 – Screen Grid	CONNECTED
PIN4	–	G3 – Suppressor Grid	CONNECTED
PIN5	–	G1 – Control Grid	CONNECTED
PIN7	–	–	IC
PIN9	–	G1 – Control Grid	CONNECTED
PIN10	–	G3 – Suppressor Grid	CONNECTED
PIN11	–	G2 – Screen Grid	CONNECTED
PIN12	–	H – Heater	CONNECTED
CAP1	–	P – Plate (Anode)	CONNECTED

SECTION RATINGS

SECTION1 Beam Power	
MAXIMUM PLATE VOLTAGE	990 V
MAXIMUM SCREEN VOLTAGE	275 V
MAXIMUM PLATE DISSIPATION	40 W
MAXIMUM SCREEN DISSIPATION	9 W
MAXIMUM CATHODE CURRENT	500 mA
<i>BeamPower section; ratings and characteristics promoted where clearly attributable.</i>	

20LF6 is a beam-power tube for television deflection or power-amplifier service. The supplied RCA manual excerpt was reviewed for heater data, physical sections, maximum ratings, electrical characteristics, capacitances, and stated operating conditions.



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 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak Positive Plate Voltage	8000 V	HorizontalDeflection
Temporary Overload Plate Dissipation	200 W	HorizontalDeflection
Peak Cathode Current	1.2 A	HorizontalDeflection
Typical Plate Voltage	160 V	—
Typical Plate Current	1400 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 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage (ae/dc) 6.3	20 V	Heater Voltage (ae/dc) 6.3 20 volts
Heater Current 2.0	600 mA	Heater Current 2.0 0.6 ampere
Plate Voltage	990 V	Plate Voltage 990 volts
Peak Positive-Pulse Plate Voltage#	8000 V	Peak Positive-Pulse Plate Voltage# 8000 volts
Plate Dissipation	40 W	Plate Dissipation 40 watts
Grid-No.3 Voltage	50 V	Grid-No.3 Voltage 50 volts

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-No.2 Voltage	275 V	Grid-No.2 Voltage 275 volts
Grid-No.2 Input	9 W	Grid-No.2 Input 9 watts
Peak Negative-Pulse Grid-No.1 Voltage	550 V	Peak Negative-Pulse Grid-No.1 Voltage 550 volts
Heater Voltage (ac/dc)	6.3 V	Heater Voltage (ac/dc) 6.3 volts
Heater Current	600 mA	Heater Current 0.6 ampere
Heater Warm-up Time (Average)	11 s	Heater Warm-up Time (Average) 11 seconds
Plate Voltage 330	330 V	Plate Voltage 330 330 volts
Grid-No.2 (Screen-Grid) Supply Voltage –	330 V	Grid-No.2 (Screen-Grid) Supply Voltage — 330 volts
Grid-No.1 Current 8	0 mA	Grid-No.1 Current 8 0 mA
Plate Dissipation 1.1	3.75 W	Plate Dissipation 1.1 3.75 watts
For grid-No.2 voltages up to	165 V	For grid-No.2 voltages up to 165 volts — 1.1
For grid-No.2 voltages between 165 and	330 V	For grid-No.2 voltages between 165 and 330 volts page 300
Maximum screen-grid voltage	990 V	Published section value
Maximum plate dissipation	40 W	Published section value

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage 50	160 V	Plate Voltage 50 160 volts
Grid-No. 3 (Suppressor-Grid) Voltage 0	0 V	Grid-No. 3 (Suppressor-Grid) Voltage 0 0 volts
Grid-No.2 (Screen-Grid) Voltage 175	160 V	Grid-No.2 (Screen-Grid) Voltage 175 160 volts
Grid-No.1 (Control-Grid) Voltage – 10	0 V	Grid-No.1 (Control-Grid) Voltage — 10 0 volts
Plate Current 800	1400 mA	Plate Current 800 1400 mA
Grid-No.2 Current 70	45 mA	Grid-No.2 Current 70 45 mA
Heater voltage	6.3 V	Rated heater condition

TUBE TINKER

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

