

ELECTRONIC TUBE REFERENCE

# 6KV6

Power - TV Horizontal Output (sweep) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION  
CONSTRUCTION  
BEAMPOWER

High-perveance beam-power tube designed for television horizontal-deflection output, providing very high peak current and pulse-voltage capability.

## GENERAL CHARACTERISTICS

|                     |                   |                      |               |
|---------------------|-------------------|----------------------|---------------|
| BASE DESIGNATION    | 9QL               | BASE PINS            | 9             |
| NOMINAL HEATER      | 6.3 V / 1.6 A     | PARALLEL HEATER      | – / –         |
| HEATING             | Indirect          | SERIES OPERATION     | Not specified |
| CATHODE ARRANGEMENT | Separate cathodes | SECTION CONSTRUCTION | Similar       |

## 9QL - TERMINAL PINOUT

| TERMINAL | SECTION | ELEMENT              | STATUS    |
|----------|---------|----------------------|-----------|
| PIN1     | –       | G2 – Screen Grid     | CONNECTED |
| PIN2     | –       | G1 – Control Grid    | CONNECTED |
| PIN3     | –       | K – Cathode          | CONNECTED |
| PIN4     | –       | H – Heater           | CONNECTED |
| PIN5     | –       | H – Heater           | CONNECTED |
| PIN6     | –       | G1 – Control Grid    | CONNECTED |
| PIN7     | –       | G2 – Screen Grid     | CONNECTED |
| PIN8     | –       | G3 – Suppressor Grid | CONNECTED |
| PIN9     | –       | –                    | IC        |
| CAP1     | A       | P – Plate (Anode)    | CONNECTED |

## SECTION RATINGS

| SECTION1 Beam Power                                                    |               |
|------------------------------------------------------------------------|---------------|
| PLATE RESISTANCE                                                       | 6000 $\Omega$ |
| TRANSCONDUCTANCE                                                       | 0.0095 S      |
| MAXIMUM PLATE VOLTAGE                                                  | 770 V         |
| MAXIMUM SCREEN VOLTAGE                                                 | 220 V         |
| MAXIMUM PLATE DISSIPATION                                              | 20 W          |
| MAXIMUM SCREEN DISSIPATION                                             | 3.5 W         |
| MAXIMUM CATHODE CURRENT                                                | 275 mA        |
| <i>Representative electrical section from supplied RCA data sheet.</i> |               |

Beam power tube rated for high-voltage-pulse shunt-regulator service in color television. Published data include max plate 770 V; gm about 9,500  $\mu$ S.

## 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

| OTHER                                   |                 |                      |
|-----------------------------------------|-----------------|----------------------|
| PARAMETER                               | PUBLISHED VALUE | CONDITION / NOTE     |
| Heater voltage nominal                  | 6.3 V           | —                    |
| Heater current                          | 1.6 A           | —                    |
| Peak Positive-Pulse Plate Voltagec ebm  | 6500 V          | Published source row |
| Peak Negative-Pulse Plate Voltage. -ebm | 1500 V          | Published source row |
| DC Grid-No                              | 3 V             | Published source row |
| DC Grid-No (value 2)                    | 75 V            | Published source row |
| DC Grid-No                              | 2 V             | Published source row |
| DC Grid-No (value 2)                    | 220 V           | Published source row |
| Heater Voltage (AC or DC) ~h            | 5.7 V           | Published source row |
| Heater Voltage (AC or DC) ~h (value 2)  | 6.9 V           | Published source row |
| Grid-No                                 | 2 W             | Published source row |
| Grid-No (value 2)                       | 3.5 W           | Published source row |
| Plate Dissipations Yb2                  | 20 W            | Published source row |
| With grid No                            | 3               | Published source row |
| With grid No (value 2)                  | 2               | Published source row |

| CHARACTERISTICS               |                 |                      |
|-------------------------------|-----------------|----------------------|
| PARAMETER                     | PUBLISHED VALUE | CONDITION / NOTE     |
| Heater Voltage Eh             | 6.3 V           | Published source row |
| Heater Current Ih             | 1.6 A           | Published source row |
| Plate Resistance (Approx.) rp | 6000            | Published source row |

| PARAMETER                             | PUBLISHED VALUE | CONDITION / NOTE     |
|---------------------------------------|-----------------|----------------------|
| Transconductance                      | <b>9500</b>     | Published source row |
| DC Plate Current ly                   | <b>5806 mA</b>  | Published source row |
| DC Plate Current ly (value 2)         | <b>80 mA</b>    | Published source row |
| DC Grid-No                            | <b>2 mA</b>     | Published source row |
| DC Grid-No (value 2)                  | <b>24 mA</b>    | Published source row |
| DC Grid-No (value 3)                  | <b>6 mA</b>     | Published source row |
| Cutoff DC Grid-No. l Voltage. Ecl(co) | <b>-42 V</b>    | Published source row |
| DC Plate Voltage Eb                   | <b>100 V</b>    | Published source row |
| DC Plate Voltage Eb (value 2)         | <b>140 V</b>    | Published source row |
| DC Grid-No                            | <b>3 V</b>      | Published source row |
| DC Grid-No (value 2)                  | <b>0 V</b>      | Published source row |
| DC Grid-No (value 3)                  | <b>0 V</b>      | Published source row |
| DC Grid-No                            | <b>2</b>        | Published source row |
| DC Grid-No (value 2)                  | <b>140</b>      | Published source row |
| DC Grid-No (value 3)                  | <b>140</b>      | Published source row |
| DC Grid-No.l Voltage Eol              | <b>0 V</b>      | Published source row |
| DC Grid-No.l Voltage Eol (value 2)    | <b>-24.5 V</b>  | Published source row |

| CAPACITANCE       |                 |                      |
|-------------------|-----------------|----------------------|
| PARAMETER         | PUBLISHED VALUE | CONDITION / NOTE     |
| Grid No           | <b>1 pF</b>     | Published source row |
| Grid No (value 2) | <b>1 pF</b>     | Published source row |
| Grid No (value 3) | <b>2 pF</b>     | Published source row |

## TUBE TINKER

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