



## ELECTRONIC TUBE REFERENCE

6159

Power - Beam (NOT sweep) electronic tube

CONSOLIDATED TECHNICAL DATA

## 1 SECTION

CONSTRUCTION

## BEAMPOWER

Beam-power transmitting tube related to the 6146 family, intended for communications RF power amplification with a 26.5 V heater.

## GENERAL CHARACTERISTICS

|                     |                   |                      |               |
|---------------------|-------------------|----------------------|---------------|
| BASE DESIGNATION    | —                 | BASE PINS            | 8             |
| NOMINAL HEATER      | 26.5 V / 300 mA   | PARALLEL HEATER      | — / —         |
| HEATING             | Indirect          | SERIES OPERATION     | Not specified |
| CATHODE ARRANGEMENT | Separate cathodes | SECTION CONSTRUCTION | Similar       |

## SECTION RATINGS

|                                                                                     |         |
|-------------------------------------------------------------------------------------|---------|
| SECTION 1 Beam Power                                                                |         |
| TRANSCONDUCTANCE                                                                    | 0.007 S |
| AMPLIFICATION FACTOR                                                                | 4.5     |
| MAXIMUM PLATE VOLTAGE                                                               | 600 V   |
| MAXIMUM SCREEN VOLTAGE                                                              | 250 V   |
| MAXIMUM PLATE DISSIPATION                                                           | 25 W    |
| MAXIMUM SCREEN DISSIPATION                                                          | 3 W     |
| <i>Published ratings and characteristics promoted from the supplied RCA source.</i> |         |

26.5 V-heater beam-power tetrode for HF RF amplification, oscillation, frequency multiplication, AF output, and modulation.



## SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

# 1956 RCA Transmitting Tubes

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

## 1956 RCA TRANSMITTING TUBES

## Section 1 · Beam Power

| CHARACTERISTIC          |                 |                  |
|-------------------------|-----------------|------------------|
| PARAMETER               | PUBLISHED VALUE | CONDITION / NOTE |
| HeaterOrFilamentVoltage | 6.3 V           | —                |
| HeaterOrFilamentCurrent | 1.25 A          | —                |



## SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

# 1963 Amperex Condensed

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

## 1963 AMPEREX CONDENSED

## Section 1 · Beam Power

| OTHER                |                 |                       |
|----------------------|-----------------|-----------------------|
| PARAMETER            | PUBLISHED VALUE | CONDITION / NOTE      |
| Plate voltage        | 600 V           | RFPowerAmplifier;CCS  |
| Plate current        | 112 mA          | RFPowerAmplifier;CCS  |
| Power output         | 52 W            | RFPowerAmplifier;CCS  |
| Control-grid voltage | -58 V           | RFPowerAmplifier;CCS  |
| Grid current         | 2.8 mA          | RFPowerAmplifier;CCS  |
| Screen voltage       | 150 V           | RFPowerAmplifier;CCS  |
| Plate voltage        | 750 V           | RFPowerAmplifier;ICAS |
| Plate current        | 120 mA          | RFPowerAmplifier;ICAS |
| Power output         | 70 W            | RFPowerAmplifier;ICAS |
| Control-grid voltage | -62 V           | RFPowerAmplifier;ICAS |

| PARAMETER                       | PUBLISHED VALUE | CONDITION / NOTE      |
|---------------------------------|-----------------|-----------------------|
| Grid current                    | <b>3.1 mA</b>   | RFPowerAmplifier;ICAS |
| Screen voltage                  | <b>160 V</b>    | RFPowerAmplifier;ICAS |
| Maximum frequency at full input | <b>60 MHz</b>   | RFPowerAmplifier      |

| CAPACITANCE               |                 |                  |
|---------------------------|-----------------|------------------|
| PARAMETER                 | PUBLISHED VALUE | CONDITION / NOTE |
| Grid-to-plate capacitance | <b>0.22 pF</b>  | Section1         |
| Input capacitance         | <b>13.5 pF</b>  | Section1         |
| Output capacitance        | <b>8.5 pF</b>   | Section1         |