



ELECTRONIC TUBE REFERENCE

831

Power - Triode electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

High-power directly heated triode; available source material does not establish a narrower functional application confidently.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	11 V / 10 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Triode	
AMPLIFICATION FACTOR	14.5
MAXIMUM PLATE VOLTAGE	3500 V
MAXIMUM PLATE DISSIPATION	400 W
<i>RCA 831 directly heated thoriated-tungsten RF transmitting power triode for Class B telephony and Class C telephony/telegraphy. Maximum DC plate voltage up to 3500 V in specified modes; plate dissipation up to 400 W in Class B and Class C telegraphy (270 W in Class C telephony). Operating-mode ratings must be observed.</i>	

RCA-831 R-F Power Amplifier, Oscillator RCA-831 is a high-power, air-cooled transmitting tube of the three-electrode type containing a thoriated-tungsten filament.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1938 RCA Transmitting Tubes

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

1938 RCA TRANSMITTING TUBES

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
D-C Plate Voltage . . 3500 3000	3500 V	D-C Plate Voltage . . 3500 3000 3500 Volts
D-C Plate Current . . 250 300	350 mA	D-C Plate Current . . 250 300 350 Milliamperes
Plate Input. . 600 650	1200 W	Plate Input. . 600 650 1200 Watts
Plate Dissipation .. 400 270	400 W	Plate Dissipation .. 400 270 400 Watts



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1940 RCA

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

1940 RCA

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament Volts (a-c or d- ϕ)	4 V	Filament Volts (a-c or d- ϕ) . 11.0 Grid-Plate Capacitance .cicnnen 4 ppt
Filament Ampcres e	3.8 A	Filament Ampcres e 10 Grid-Filament Capacitance 3.8 upf
Amplification Factor	1.4 A	Amplification Factor ... 14.5 Plate-Filament Capacitance . 1.4 uuf

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
D-C PLATE VOLTAGE ... e	3500 V	D-C PLATE VOLTAGE ... e 3500 3000 3500 Volts
D-C GrID VOLTAGE .. —	-1000 V	D-C GrID VOLTAGE .. — -1000 -1000 Volts
D-C PLATE CURRENT	350 mA	D-C PLATE CURRENT - 250 300 350 Milliamperes
D/C GRID CURRENT ucrvmmemremsssmssssnsrsns . —	75 mA	D/C GRID CURRENT ucrvmmemremsssmssssnsrsns . — 75 75 Milliamperes
PrLaTe INPUT	1200 W	PrLaTe INPUT 600 650 1200 Watts
PLATE DISSIPATION unoeerceccernricmmnnssanensasersnes	400 W	PLATE DISSIPATION unoeerceccernricmmnnssanensasersnes 400 270 400 Watts

TUBE TINKER

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