



ELECTRONIC TUBE REFERENCE

6850

Power - Beam (NOT sweep) electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

BEAMPOWER-BEAMPOWER

Twin beam-power transmitting tube for AF/RF amplification, oscillation, modulation, and frequency-tripler service, with reduced-input operation extending to about 470 MHz.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	9
NOMINAL HEATER	12.6 V / 625 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Common cathode	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Beam Power	
TRANSCONDUCTANCE	0.0045 S
AMPLIFICATION FACTOR	8.5
MAXIMUM PLATE VOLTAGE	600 V
MAXIMUM SCREEN VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	25 W
12.6-V heater variant of 6524 twin beam-power tube; electrical characteristics inherited from the explicitly referenced 6524 parent. Identical-section compression applied.	

SECTION2 Beam Power	
TRANSCONDUCTANCE	0.0045 S
AMPLIFICATION FACTOR	8.5
MAXIMUM PLATE VOLTAGE	600 V
MAXIMUM SCREEN VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	25 W
<i>Second physical beam-power unit; RCA 6524/6850 twin-beam data, ratings per tube.</i>	

The RCA 6850 is a twin beam power tube for AF/RF amplification, oscillation, modulation, and frequency-tripler service; it is identical to 6524 except for heater rating.



SOURCE OPERATING CONDITIONS

1940 RCA

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

1940 RCA

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Frequency	470 MHz	—
RFPowerOutput	56 W	UpTo100MHz



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

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Full-Input Frequency	100 MHz	—
Maximum Reduced-Input Frequency	470 MHz	—



SOURCE OPERATING CONDITIONS

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1971 RCA HB3 Binder 6 of 7

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

1971 RCA HB3 BINDER 6 OF 7

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Voltage – published value 1	12.6	Published datasheet value
Voltage – published value 2	10	Published datasheet value
Current – published value 1	0	Published datasheet value
Current – published value 2	625	Published datasheet value
Heater Current – published value 1	1 A	Published datasheet value
Heater Current – published value 2	588 mA	Published datasheet value
Heater Current – published value 3	663 mA	Published datasheet value
Note I	12.6	Published datasheet value