



ELECTRONIC TUBE REFERENCE

4637

Power - Beam (NOT sweep) (over 1000V 100W) electronic tube

CONSOLIDATED TECHNICAL
DATA

1 SECTION
CONSTRUCTION
BEAMPOWER

RCA high-power beam-power transmitting tube for RF, pulse, modulation, and related transmitter service, with 300-watt maximum plate dissipation and application-specific operating limits.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / 3.2 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Beam Power	
AMPLIFICATION FACTOR	18
MAXIMUM PLATE VOLTAGE	2500 V
MAXIMUM SCREEN VOLTAGE	400 V
MAXIMUM PLATE DISSIPATION	300 W
MAXIMUM CATHODE CURRENT	250 mA
<i>Published maximum ratings/general electrical characteristics promoted directly; pulse, RF, capacitance, cooling, and service-specific values retained in TUBE_SECTION_PARAMETER.</i>	

High-power beam power tube for RF, pulse, modulation, or transmitting service. The RCA source was reviewed for heater/filament data, maximum ratings, RF and pulse operating conditions, capacitances, cooling requirements, and application-specific limits.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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

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Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	2500 V	PromotedValue
Maximum screen-grid voltage	400 V	PromotedValue
Maximum plate dissipation	300 W	PromotedValue
Maximum cathode/plate current	250 mA	PromotedValue
and heater)	250 mA	Published datasheet value
Plate-Core Temperature	250 mA	Published datasheet value

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Mu / amplification factor	18	PromotedValue
Heater/filament voltage	6.3 V	Nominal operating value
Heater/filament current	3.2 A	Nominal operating value
RF Power Amplifier and Oscillator to 1215 MHz	1215 A	Published datasheet value
Matrix•Type Cathode	340 W	CW
105 Watts CW Power – published value 1	105 W	CW
105 Watts CW Power – published value 2	400 W	CW
Output at 1215 MHz	1215 MHz	Published datasheet value
Voltage (ac or dc)	6.3 V	Published datasheet value
Current at 6.3 volts – published value 1	6.3 V	Published datasheet value
Current at 6.3 volts – published value 2	3.2 V	Published datasheet value

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Minimum heating time	60	Published datasheet value
Mu-Factor, Grid No.2 to Grid No.1	18	Published datasheet value
DC Plate Voltage	2500 V	Published datasheet value
DC Grid-No.2 Voltage	400 V	Published datasheet value
DC Grid-No.1 Voltage	200 V	Published datasheet value
DC Plate Current	250 mA	Published datasheet value
Plate Dissipation	300	Published datasheet value

TUBE TINKER

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