



ELECTRONIC TUBE REFERENCE

6146

Power - Beam (NOT sweep) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

BEAMPOWER

Beam-power transmitting tube for HF RF amplification, oscillation, frequency multiplication, AF power amplification, and modulation, with useful transmitting output extending into VHF.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	8
NOMINAL HEATER	6.3 V / 1.25 A	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
MAXIMUM CATHODE CURRENT	140 mA
<i>Electrical values extracted from the supplied source table; typical operating values are preserved in TUBE_SECTION_PARAMETER.</i>	

Beam-power tube for HF RF amplification, oscillation, frequency multiplication, AF power amplification, 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	—
Application	AFPPowerAmplifierModulatorRFPowerAmplifierOscillator	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
MaximumOperatingFrequency	175 MHz	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1958 Amperex Industrial

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

1958 AMPEREX INDUSTRIAL

Section 1 · Beam Power

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Amplification factor	4.5	—
Maximum frequency	60 MHz	—
Grid-to-plate capacitance	0.22 pF	—
Grid-to-filament capacitance	13.5 pF	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate-to-filament capacitance	8.5 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate dissipation CCS	20 W	CCS
Maximum plate dissipation ICAS	25 W	ICAS
Plate voltage	600 V	CCS ClassC
Plate current	112 mA	CCS ClassC
Power output	52 W	CCS ClassC
Grid voltage	-58 V	CCS ClassC
Grid current	2.8 mA	CCS ClassC
Screen voltage	150 V	CCS ClassC
Plate voltage	750 V	ICAS ClassC
Plate current	120 mA	ICAS ClassC
Power output	70 W	ICAS ClassC
Grid voltage	-62 V	ICAS ClassC
Grid current	3.1 mA	ICAS ClassC
Screen voltage	160 V	ICAS ClassC


SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1958 Brimar Radio Valve No 7

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

1958 BRIMAR RADIO VALVE NO 7

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Operating Frequency	175 MHz	ClassC,Telegraphy
Plate Voltage	600 V	ClassC

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Power Output	52 W	ClassC

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	200 V	—
Plate Current	100 mA	—
Transconductance	7000 μ S	—


SOURCE DATA APPENDIX

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
Grid current	3.1 mA	RFPowerAmplifier;ICAS
Screen voltage	160 V	RFPowerAmplifier;ICAS
Maximum frequency at full input	60 MHz	RFPowerAmplifier

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