



ELECTRONIC TUBE REFERENCE

829B

Power - Beam (NOT sweep) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

BEAMPOWER

Twin-beam transmitting tube designed for VHF RF power-amplifier and oscillator service in push-pull circuits.

GENERAL CHARACTERISTICS

BASE DESIGNATION	7E-VA	BASE PINS	7
NOMINAL HEATER	12.6 V / 1.125 A	PARALLEL HEATER	6.3 V / 2.25 A
HEATING	Indirect	SERIES OPERATION	Capable
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Beam Power	
TRANSCONDUCTANCE	0.0085 S
AMPLIFICATION FACTOR	9
MAXIMUM PLATE VOLTAGE	750 V
MAXIMUM SCREEN VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	20 W
MAXIMUM SCREEN DISSIPATION	8 W
MAXIMUM CATHODE CURRENT	240 mA
Representative row for two electrically identical beam-tetrode sections; ratings vary by service/cooling condition.	

Twin-beam transmitting tube for VHF RF power-amplifier and oscillator service.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1950 General Electric Transmitting Types

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

1950 GENERAL ELECTRIC TRANSMITTING TYPES

Section 1 · Beam Power

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterOrFilamentVoltage	6.3 V	—
HeaterOrFilamentCurrent	2.25 A	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
FrequencyForMaximumRatings	200 MHz	—



SOURCE OPERATING CONDITIONS

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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
Transconductance	8500 μ S	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	750 V	—
Maximum Screen Voltage	225 V	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Dissipation	45 W	—
Maximum Cathode Current	240 mA	—
Full-Input Operating Frequency Maximum	200 MHz	—
Power Output	90 W	ClassC,RF
Heater Voltage Series	12.6 V	—
Heater Current Series	1.125 A	—
Heater Voltage Parallel	6.3 V	—
Heater Current Parallel	2.25 A	—
Typical Plate Voltage	600 V	Representative published point
Typical Plate Current	200 mA	Representative published point



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1960 Mazda

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1960 MAZDA

Section 1 · Beam Power

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid1AnodeCapacitancePerElement	0.12 pF	—
InputCapacitancePerElement	14.5 pF	—
OutputCapacitancePerElement	7 pF	—
ScreenCathodeCapacitance	65 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
MaximumHeaterCathodePeakVoltage	100 V	—
Typical Plate Voltage	600 V	—
Typical Screen Voltage	200 V	—
TypicalOutputPower	58 W	—

SOURCE OPERATING CONDITIONS

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1963 Amperex Condensed

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1963 AMPEREX CONDENSED

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	750 V	RFPowerAmplifier;EachSection
Plate current	120 mA	RFPowerAmplifier;EachSection
Power output	65 W	RFPowerAmplifier
Control-grid voltage	-50 V	RFPowerAmplifier
Grid current	8 mA	RFPowerAmplifier
Screen voltage	200 V	RFPowerAmplifier

TUBE TINKER

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