



ELECTRONIC TUBE REFERENCE

2E30

Power - Beam (NOT sweep) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

BEAMPOWER

Beam-power transmitting tetrode for communications and RF power service, designed to provide useful transmitter output at high frequencies.

GENERAL CHARACTERISTICS

BASE DESIGNATION	7CQ	BASE PINS	7
NOMINAL HEATER	6 V / 650 mA	PARALLEL HEATER	3 V / 1.3 A
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Beam Power	
PLATE RESISTANCE	63000 Ω
TRANSCONDUCTANCE	0.0037 S
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	10 W
MAXIMUM SCREEN DISSIPATION	2.5 W
MAXIMUM CATHODE CURRENT	60 mA
<i>Promoted from the printed maximum-rating/characteristic columns; additional operating-point and capacitance data are retained in TUBE_SECTION_PARAMETER.</i>	

Directly heated beam-power amplifier with dual 6 V/3 V filament configurations for Class-A output 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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum full-rating frequency	165 MHz	—



SOURCE OPERATING CONDITIONS

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195X General Electric Essential Characteristics

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

195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

Section 1 · Beam Power

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	9.6 pF	Section1
Output capacitance	14 pF	Section1
Grid-to-plate capacitance	0.18 pF	Section1

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	250 V	ClassA
Screen voltage	250 V	ClassA
Control-grid voltage	-20 V	ClassA

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate current	40 mA	ClassA
Screen current	3.3 mA	ClassA
Load resistance	4500 Ω	ClassA
Power output	4.5 W	ClassA

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	63000 Ω	ClassA
Transconductance	3700 μS	ClassA


SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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195X Raytheon Special Purpose Tubes

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

195X RAYTHEON SPECIAL PURPOSE TUBES

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Grid 1 Voltage	-150 V	—
Maximum Grid 3 Voltage	0 V	—
Maximum Plate Current	60 mA	—
Maximum Grid 1 Current	3 mA	—
Drive Power	0.2 W	—
Output Power	7.5 W	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-Plate Capacitance	0.18 pF	—