

ELECTRONIC TUBE REFERENCE

3E5

Power - Beam (NOT sweep) electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
BEAMPOWER

Directly heated beam-power amplifier with series/parallel filament operation, intended for low-voltage battery receiver power-output service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	6BX	BASE PINS	7
NOMINAL HEATER	2.8 V / 50 mA	PARALLEL HEATER	1.4 V / 50 mA
HEATING	Direct	SERIES OPERATION	Capable
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

6BX - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – F	–	F – Filament	CONNECTED
PIN2 – P	A	P – Plate (Anode)	CONNECTED
PIN3 – G2	A	G2 – Screen Grid	CONNECTED
PIN4 – IC	–	–	IC
PIN5 – G3	A	G3 – Suppressor Grid	CONNECTED
PIN5 – FCT	–	FCT – Filament Center Tap	CONNECTED
PIN6 – G1	A	G1 – Control Grid	CONNECTED
PIN7 – F	–	F – Filament	CONNECTED

SECTION RATINGS

SECTION1 Beam Power	
PLATE RESISTANCE	100000 Ω
TRANSCONDUCTANCE	0.00155 S
MAXIMUM PLATE VOLTAGE	135 V
MAXIMUM SCREEN VOLTAGE	90 V
<i>Directly heated beam-power amplifier with series/parallel filament operation.</i>	

Directly heated beam-power amplifier with series/parallel filament operation.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1950 Sylvania

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

1950 SYLVANIA

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament voltage series	2.8 V	Series
Filament current series	25 mA	Series
Filament voltage parallel	1.4 V	Parallel
Filament current parallel	50 mA	Parallel



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	90 V	ClassA;ParallelFilaments
Screen-grid voltage	90 V	ClassA;ParallelFilaments
Grid No.1 bias	7 V	ClassA;ParallelFilaments
Plate current	8 mA	ClassA;ParallelFilaments
Screen-grid current	1.6 mA	ClassA;ParallelFilaments
Plate resistance	100000 ohm	ClassA;ParallelFilaments
Transconductance	1550 uS	ClassA;ParallelFilaments

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Load resistance	8000 ohm	ClassA;ParallelFilaments
Power output	0.25 W	ClassA;ParallelFilaments
Plate voltage	67.5 V	ClassA;ParallelFilamentsLowVoltage
Screen-grid voltage	67.5 V	ClassA;ParallelFilamentsLowVoltage
Grid No.1 bias	5 V	ClassA;ParallelFilamentsLowVoltage
Plate current	5.5 mA	ClassA;ParallelFilamentsLowVoltage
Screen-grid current	1.1 mA	ClassA;ParallelFilamentsLowVoltage
Plate resistance	120000 ohm	ClassA;ParallelFilamentsLowVoltage
Transconductance	1400 uS	ClassA;ParallelFilamentsLowVoltage
Load resistance	8000 ohm	ClassA;ParallelFilamentsLowVoltage
Power output	0.125 W	ClassA;ParallelFilamentsLowVoltage
Plate voltage	90 V	ClassA;SeriesFilaments
Screen-grid voltage	90 V	ClassA;SeriesFilaments
Grid No.1 bias	7 V	ClassA;SeriesFilaments
Plate current	6.8 mA	ClassA;SeriesFilaments
Screen-grid current	1.4 mA	ClassA;SeriesFilaments
Plate resistance	120000 ohm	ClassA;SeriesFilaments
Transconductance	1450 uS	ClassA;SeriesFilaments
Load resistance	9000 ohm	ClassA;SeriesFilaments
Power output	0.225 W	ClassA;SeriesFilaments
Plate voltage	67.5 V	ClassA;SeriesFilamentsLowVoltage
Screen-grid voltage	67.5 V	ClassA;SeriesFilamentsLowVoltage
Grid No.1 bias	5 V	ClassA;SeriesFilamentsLowVoltage
Plate current	4.4 mA	ClassA;SeriesFilamentsLowVoltage
Screen-grid current	0.9 mA	ClassA;SeriesFilamentsLowVoltage
Plate resistance	130000 ohm	ClassA;SeriesFilamentsLowVoltage
Transconductance	1300 uS	ClassA;SeriesFilamentsLowVoltage
Load resistance	11000 ohm	ClassA;SeriesFilamentsLowVoltage
Power output	0.115 W	ClassA;SeriesFilamentsLowVoltage



1961 Tung Sol

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

1961 TUNG SOL

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
MAX IMUM PLATE VOLTAGE 110	110 VOLTS	Published datasheet value
PLATE VOLTAGE 67.5 90 67.5	90 VOLTS	Published datasheet value
LOAD RESISTANCE 7 000 8 000 7 000 8	0 OHMS	Published datasheet value
1 POWER OUTPUT 100 200 90	175 MW	Published datasheet value

TUBE TINKER

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