



ELECTRONIC TUBE REFERENCE

6677

Power - Beam Single (NOT sweep) (under 10W) electronic tube

CONSOLIDATED TECHNICAL
DATA

1 SECTION
CONSTRUCTION
PENTODE

Beam-power output tube for substantial audio or general amplifier service, designed for higher-power operation than ordinary receiving output tubes.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	8
NOMINAL HEATER	6.3 V / 650 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Pentode	
PLATE RESISTANCE	18000 Ω
TRANSCONDUCTANCE	0.011 S
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM SCREEN VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	8.5 W
MAXIMUM SCREEN DISSIPATION	2 W
MAXIMUM CATHODE CURRENT	75 mA
<i>Alias/co-designation of 6CL6;</i>	

Beam-power pentode for RF power oscillator/amplifier and small-signal power service.



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 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance	150000 ohm	—
Transconductance	11000 μ S	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	330 V	—
Maximum Screen Voltage	330 V	—
Maximum Plate Dissipation	8.5 W	—
Maximum Screen Dissipation	2 W	—
Plate Voltage	250 V	—
Screen Voltage	150 V	—
Plate Current	30 mA	—
Maximum Signal Power Output	2.8 W	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1960 RCA Industrial and Communications Types

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

1960 RCA INDUSTRIAL AND COMMUNICATIONS TYPES

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.3 V	—
Heater Current	650 mA	—
EquivalentType	6CL6	RenewalUse



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

SOURCE PDF

1965 Sylvania Electronic Tubes Vol3

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

1965 SYLVANIA ELECTRONIC TUBES VOL3

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.3 V	—
Heater Current	650 mA	—
EquivalentElectricalType	6CL6	—
Transconductance	6200 uS	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	250 V	ClassA
Screen Voltage	150 V	ClassA
Plate Current	30 mA	ClassA



SOURCE DATA APPENDIX

1971 RCA HB3 Binder 3 of 7

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

1971 RCA HB3 BINDER 3 OF 7

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	Nominal
Heater current	650 mA	Nominal
Maximum plate voltage	330 V	Promoted published value
Maximum screen voltage	330 V	Promoted published value
Maximum plate dissipation	8.5 W	Promoted published value
Maximum screen dissipation	2 W	Promoted published value
Grid No.1 to plate	0.12 mA	Direct Interelectrode Capacitances:°
PLATE VOLTAGE.	330 V	Maximum Ratings, Design-Maximum Palues:
GRID-No.3 (SUPPRESSOR-GRID) VOLTAGE	0 V	Maximum Ratings, Design-Maximum Palues:
GRID-No.2 (SCREEN-GRID)1 SUPPLY VOLTAGE .	330 V	Maximum Ratings, Design-Maximum Palues:
GRID-No.2 VOLTAGE See Grid-No.2 Inqut Rating Chart	2 V	Maximum Ratings, Design-Maximum Palues:
GRID-No.1 (CONTROL-GRID) VOLTAGE	1 V	Maximum Ratings, Design-Maximum Palues:
For grid-No.2 voltages up to	2 V	Maximum Ratings, Design-Maximum Palues:
For grid-No.2 voltages between	165 V	Maximum Ratings, Design-Maximum Palues:
330 volts See Grid-Ro.2 Inbut Rating Chart	2 V	Maximum Ratings, Design-Maximum Palues:
PLATE DISSIPATION	8.5 W	Maximum Ratings, Design-Maximum Palues:
Heater negative with respect to cathode	100 V	Maximum Ratings, Design-Maximum Palues:
Heater positive with respect to cathode	100 V	Maximum Ratings, Design-Maximum Palues:
Heater Voltage	6.3 V	Typical Operation and Characteristics:
Plate Voltage	250 V	Typical Operation and Characteristics:

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-No.2 Voltage	150 V	Typical Operation and Characteristics:
Grid-No.1 Voltage –3 volts	3 V	Typical Operation and Characteristics:
Peak AF Grid-No.1 Voltage	3 V	Typical Operation and Characteristics:
Zero-Signal Plate Current	30 mA	Typical Operation and Characteristics:
Max.-Signal Plate Current	31 mA	Typical Operation and Characteristics:
Zero-Signal Grid-No.2 Current	7 mA	Typical Operation and Characteristics:
Max.-Signal Grid-No.2 Current	7.2 mA	Typical Operation and Characteristics:
Plate Resistance (Approx)	15 megohm	Typical Operation and Characteristics:
Transconductance	11000 uS	Typical Operation and Characteristics:
Load Resistance	7500 ohm	Typical Operation and Characteristics:
For cathode-bias operation	0.5 megohm	Typical Operation and Characteristics:
much as	35 V	Typical Operation and Characteristics:
volts =	7.5 V	Typical Operation and Characteristics:
135 volts positive with respect to cathode, and all other	135 V	Typical Operation and Characteristics:
With heater volts =	3 V	Typical Operation and Characteristics:
ted to cathode at socket, grid-No.2 volts =	150 V	Typical Operation and Characteristics:

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	150000 ohm	Promoted published value
Transconductance	11000 uS	Promoted published value
Voltage	20 V	—
Current at	0.65 V	—