



ELECTRONIC TUBE REFERENCE

6BD4

Triode - HV Shunt Regulator electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
TRIODE

High-voltage triode designed for electronic voltage-regulator service, controlling or shunting current to stabilize demanding power supplies.

GENERAL CHARACTERISTICS

BASE DESIGNATION	6BD4	BASE PINS	7
NOMINAL HEATER	6.3 V / 600 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
AMPLIFICATION FACTOR	1650
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	20 W
MAXIMUM CATHODE CURRENT	1.5 mA
MAXIMUM HEATER-CATHODE VOLTAGE	180 V
<i>Published promoted fields populated semantically; identical repeated sections compressed where applicable.</i>	

Beam triode for very-high-voltage electronic regulation and voltage-control 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 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage (ACor DC)..... 6.3 Volts	6.3 V	Heater Voltage (ACor DC)..... 6.3 Volts
DCPlate Current..... 1.5 1.5 Ma	1.5 mA	DCPlate Current..... 1.5 1.5 Ma
Plate Dissipation. 20 25 Watts	25 W	Plate Dissipation. 20 25 Watts
Resistance of More Than 8 Megohms. . . . 3.0 4.0 Megohms	4 Megohm	Resistance of More Than 8 Megohms. . . 3.0 4.0 Megohms
Resistance of Less Than 8 Megohms. . . . See See	8 Megohm	Resistance of Less Than 8 Megohms. See See
Operation of the 6BD4 at plate voltages above 16,000 volts (absolute)	16 V	Operation of the 6BD4 at plate voltages above 16,000 volts (absolute)
The Types 6BD4 and 6BD4A are beam triode, high-voltage, low current	4 A	The Types 6BD4 and 6BD4A are beam triode, high-voltage, low current

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Peak Heater-Cathode Voltage..... 180 Volts	180 V	Maximum Peak Heater-Cathode Voltage..... 180 Volts

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 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.3 V	—
Heater Current	600 mA	—



SOURCE DATA APPENDIX

195X General Electric Essential Characteristics

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195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS
Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum unregulated DC supply voltage	40000 V	HighVoltageShuntRegulator
Maximum DC plate current	1.5 mA	HighVoltageShuntRegulator
Maximum plate dissipation	20 W	HighVoltageShuntRegulator



SOURCE DATA APPENDIX

1961 Tung Sol

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Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum DC Plate Current	1.5 mA	—
Plate Dissipation	0.2 W	—



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1966 Tung Sol Electronic Tubes 1 of 4

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1966 TUNG SOL ELECTRONIC TUBES 1 OF 4

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Unregulated DC supply voltage maximum	40000 V	VoltageControl
DC plate voltage maximum	20000 V	VoltageControl
DC plate current maximum	2.5 mA	VoltageControl
Grid voltage DC maximum	-125 V	VoltageControl
Grid voltage peak maximum	-550 V	VoltageControl
Regulated DC output voltage at 0 mA load	20000 V	VoltageControl
Regulated DC output voltage at 1 mA load	19700 V	VoltageControl

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Amplification factor	1650	Section1

TUBE TINKER

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and their source documents.

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