



ELECTRONIC TUBE REFERENCE

6SG7

Voltage Pentode - Remote Cutoff (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
PENTODE

Semi-variable-mu RF pentode intended for controlled high-frequency signal amplification. Its intermediate cutoff characteristic provides gain regulation while preserving useful RF performance in receiver stages.

GENERAL CHARACTERISTICS

BASE DESIGNATION	RTMA 8BK	BASE PINS	8
NOMINAL HEATER	6.3 V / 300 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Pentode	
PLATE RESISTANCE	900000 Ω
TRANSCONDUCTANCE	0.0047 S
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	200 V
MAXIMUM PLATE DISSIPATION	3 W
MAXIMUM SCREEN DISSIPATION	0.6 W
<i>Promoted characteristics use the published 250 V plate / 125 V screen operating point.</i>	

Semi-variable-mu RF pentode.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1948 Brimar Radio Valve Manual

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

1948 BRIMAR RADIO VALVE MANUAL

Section 1 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.3 V	—
Heater Current	300 mA	—



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 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	300 V	Published handbook rating
Maximum screen voltage	150 V	Published handbook rating
Plate voltage	250 V	ClassA OperatingPoint1
Screen voltage	150 V	ClassA OperatingPoint1
Control-grid bias	2.5 V	ClassA OperatingPoint1
Plate current	9.2 mA	ClassA OperatingPoint1
Screen current	3.4 mA	ClassA OperatingPoint1

Characteristic		
Parameter	Published Value	Condition / Note
Plate resistance	1000000 ohm	ClassA OperatingPoint1
Transconductance	4000 μ S	ClassA OperatingPoint1
Heater voltage	6.3 V	Published heater rating
Heater current	300 mA	Published heater rating



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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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 · Pentode

Characteristic		
Parameter	Published Value	Condition / Note
Transconductance	4700 μ S	AlternateOperatingPoint



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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1968 General Electric Co

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

1968 GENERAL ELECTRIC CO

Section 1 · Pentode

Other		
Parameter	Published Value	Condition / Note
Plate Voltage	250 V	ClassA
Screen Voltage	125 V	ClassA

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Current	1.8 mA	ClassA
Screen Current	4.4 mA	ClassA

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-Plate Capacitance Maximum	0.003 pF	—