



ELECTRONIC TUBE REFERENCE

CONSOLIDATED TECHNICAL DATA

6SH7

1 SECTION
CONSTRUCTION
PENTODE

Voltage Pentode - Sharp Cutoff (single) electronic tube

Sharp-cutoff high-transconductance pentode for fixed-gain RF and IF amplification in professional high-frequency equipment.

GENERAL CHARACTERISTICS

BASE DESIGNATION	RMA 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

SECTION1 Pentode	
PLATE RESISTANCE	900000 Ω
TRANSCONDUCTANCE	0.0049 S
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM SCREEN VOLTAGE	165 V
MAXIMUM PLATE DISSIPATION	3.3 W
MAXIMUM SCREEN DISSIPATION	0.77 W
Absolute maximum values promoted; typical transconductance read as 4900 micromhos at 250 V plate / 150 V screen.	

Sharp-cutoff 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](#)

1953 RFT Rundfunk Technik

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

1953 RFT RUNDFUNK TECHNIK

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterVoltageNominal	6.3 V	Nominal
HeaterCurrentNominal	300 mA	Nominal
Maximum Plate Voltage	300 V	—
Maximum Screen Voltage	150 V	—
Maximum Plate Dissipation	3 W	—
Maximum Screen Dissipation	0.7 W	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	4900 μ S	Typical
Plate Resistance	900000 ohm	Typical



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	1 V	ClassA OperatingPoint1
Plate current	10.8 mA	ClassA OperatingPoint1
Screen current	4.1 mA	ClassA OperatingPoint1

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	900000 ohm	ClassA OperatingPoint1
Transconductance	4900 μ S	ClassA OperatingPoint1
Heater voltage	6.3 V	Published heater rating
Heater current	300 mA	Published heater rating



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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	150 V	ClassA
Grid Voltage	-1 V	ClassA

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Current	10.8 mA	ClassA
Screen Current	4.1 mA	ClassA