



ELECTRONIC TUBE REFERENCE

959

Voltage Pentode - Sharp Cutoff (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

PENTODE

Directly heated acorn sharp-cutoff pentode designed for dry-cell battery RF amplifier service. It combines compact high-frequency construction with low-power filament operation for portable receiving equipment.

GENERAL CHARACTERISTICS

BASE DESIGNATION	5BE	BASE PINS	7
NOMINAL HEATER	1.25 V / 50 mA	PARALLEL HEATER	– / –
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Pentode	
PLATE RESISTANCE	800000 Ω
TRANSCONDUCTANCE	0.0006 S
MAXIMUM PLATE VOLTAGE	145 V
MAXIMUM SCREEN VOLTAGE	67.5 V
<i>Published amplifier ratings and Class A characteristics promoted.</i>	

Directly heated acorn sharp-cutoff pentode for dry-cell battery RF-amplifier service.

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	145 V	Published handbook rating
Maximum screen voltage	67.5 V	Published handbook rating
Plate voltage	135 V	ClassA
Screen voltage	67.5 V	ClassA
Control-grid bias	3 V	ClassA
Plate current	1.7 mA	ClassA
Screen current	0.4 mA	ClassA

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	800000 ohm	Published handbook characteristic
Transconductance	600 μ S	Published handbook characteristic
Heater/filament voltage	1.25 V	Published heater/filament rating
Heater/filament current	50 mA	Published heater/filament rating

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

Section 1 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterOrFilamentVoltage	1.25 V	—
HeaterOrFilamentCurrent	50 mA	—
Application	Dry-cell battery RF amplifier	—



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
Filament voltage	1.25 V	Nominal
Filament current	50 mA	Nominal
Maximum DC plate voltage	145 V	Amplifier
Maximum DC screen voltage	67.5 V	Amplifier
DC plate voltage	135 V	ClassA
DC screen voltage	67.5 V	ClassA
DC control-grid voltage	-3 V	ClassA
DC plate current	1.7 mA	ClassA
DC screen current	0.4 mA	ClassA

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	0.015 pF	Maximum; with shield baffle
Input capacitance	1.8 pF	—
Output capacitance	2.5 pF	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	0.8 Mohm	ClassA; approximate
Transconductance	600 uS	ClassA