



ELECTRONIC TUBE REFERENCE

6007

Power - Pentode Single (NOT beam) (under 10W) electronic tube

CONSOLIDATED TECHNICAL
DATA

1 SECTION
CONSTRUCTION
PENTODE

Directly heated subminiature power pentode designed for portable, wearable, or low-battery-drain output-amplifier service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	512-AX	BASE PINS	5
NOMINAL HEATER	1.25 V / 13.3 mA	PARALLEL HEATER	– / –
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	400000 Ω
TRANSCONDUCTANCE	0.000475 S
MAXIMUM PLATE VOLTAGE	45 V
MAXIMUM SCREEN VOLTAGE	45 V
MAXIMUM PLATE DISSIPATION	0.025 W
MAXIMUM SCREEN DISSIPATION	0.006 W
MAXIMUM CATHODE CURRENT	0.6 mA
Directly heated power-amplifier pentode.	

6007 is a Pentode device. Radiation-cooled directly heated miniature pentode output amplifier for hearing aids and low-battery-drain receivers; source co-designates 6007/5913.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1953 Amperex

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

1953 AMPEREX

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum filament voltage	1.55 V	Published source value
Minimum filament voltage	0.9 V	Published source value
Typical plate voltage	22.5 V	Published source value
Typical screen-grid voltage	22.5 V	Published source value
Typical plate current	475 uA	Published source value
Single-ended power output at 45 V battery	6 mW	ClassA;OneTube
Push-pull power output at 22.5 V battery	4.2 mW	ClassAB;PushPull;TwoTubes



SOURCE OPERATING CONDITIONS

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1958 Amperex Industrial

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

1958 AMPEREX INDUSTRIAL

Section 1 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	0.2 pF	—
Input capacitance	2.5 pF	—
Output capacitance	2.2 pF	—
Plate resistance	0.4 MOhm	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	420 μ S	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	45 V	—
Maximum plate dissipation	25 mW	—
Control-grid voltage	-0.2 V	—
Screen-grid voltage	45 V	—
Plate current	475 μ A	—



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

SOURCE PDF

195X General Electric Essential Characteristics

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195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

Section 1 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	2.5 pF	—
Output capacitance	2.2 pF	—
Grid-to-plate capacitance	0.24 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	22.5 V	ClassA
Screen voltage	22.5 V	ClassA
Control-grid bias	-0.2 V	ClassA
Plate current	0.475 mA	ClassA
Screen current	0.1 mA	ClassA
Plate resistance	400000 ohm	ClassA

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	420 μ S	ClassA



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Amperex Condensed

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1963 AMPEREX CONDENSED

Section 1 · Pentode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	0.2 pF	—
Input capacitance	2.5 pF	—
Output capacitance	22 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	45 V	—
Grid voltage	-0.2 V	—
Screen voltage	45 V	—
Output power	6 mW	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	475 μ S	—
Plate resistance	0.4 M Ω m	—

TUBE TINKER

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