

ELECTRONIC TUBE REFERENCE

7591S

Power - Pentode (NOT beam) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
PENTODE

Power/output pentode designed for low-frequency or audio-frequency output amplification.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	8
NOMINAL HEATER	6.3 V / 800 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	29000 Ω
TRANSCONDUCTANCE	0.01 S
AMPLIFICATION FACTOR	16.8
MAXIMUM PLATE VOLTAGE	550 V
MAXIMUM SCREEN VOLTAGE	440 V
MAXIMUM PLATE DISSIPATION	19 W
MAXIMUM SCREEN DISSIPATION	3.3 W
MAXIMUM CATHODE CURRENT	85 mA
Power pentode with Class A1 typical characteristics.	

The source identifies this device as 7591S power pentode.



SOURCE OPERATING CONDITIONS

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199X JJ

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

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Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical Plate Voltage	300 V	—
Typical Screen Voltage	300 V	—
TypicalControlGridVoltage	-10 V	—
Typical Plate Current	60 mA	—
Typical Screen Current	8 mA	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
GridCapacitance	10 pF	—
Plate Capacitance	5 pF	—
PlateGridCapacitance	0.25 pF	—



SOURCE OPERATING CONDITIONS

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2026 JJ Electronic

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Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
U _f	6.3 V	Published value
I _f	800 mA	Published value

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Ua	550 V	Published value
Ug2	440 V	Published value
Wa	19 W	Published value
Wg2	3.3 W	Published value
Ik	85 mA	Published value
Rg1	0.3 MΩ	Published value
Ukf	200 V	Published value

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Ua	300 V	Published value
Ug2	300 V	Published value
Ug1	-10 V	Published value
Ia	60 mA	Published value
Ig2	8 mA	Published value
S	10000 μS	Published value
μ	16.8	Published value

TUBE TINKER

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