



ELECTRONIC TUBE REFERENCE

EF806S

Voltage Pentode electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
PENTODE

Long-life low-noise pentode for high-quality microphone, recording, and precision audio preamplifier stages.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	9
NOMINAL HEATER	6.3 V / 200 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	2000000 Ω
TRANSCONDUCTANCE	0.002 S
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	200 V
MAXIMUM PLATE DISSIPATION	1 W
MAXIMUM SCREEN DISSIPATION	0.2 W
MAXIMUM CATHODE CURRENT	6 mA
Promoted ratings and characteristics are taken from the printed target-tube entry in the approved PDF.	

Long-life low-noise AF pentode.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1953 AEG

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

1953 AEG

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical Plate Voltage	250 V	—
Typical Screen Voltage	140 V	—
Typical Plate Current	3.2 mA	—
Typical Screen Current	0.6 mA	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input Capacitance	4 pF	—
Output Capacitance	5.5 pF	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1959 Telefunken

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

1959 TELEFUNKEN

Section 1 · Pentode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Low-noise design	Yes	—

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Triode-connected operation	Published	TriodeConnection


SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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195X Tesla

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195X TESLA

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterVoltageNominal	6.3 V	Nominal
HeaterCurrentNominal	200 mA	Nominal
Maximum Plate Voltage	300 V	—
Maximum Screen Voltage	300 V	—
Maximum Plate Dissipation	1 W	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	2200 μ S	Typical


SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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1981 Russian Tubes Katsnelson and Larionov

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

1981 RUSSIAN TUBES KATSNELSON AND LARIONOV

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	Published nominal/basic-parameter heater condition.
Heater current	200 mA	Published heater current.
Plate current	3.2 mA	Published basic-parameter operating point.
Screen current	0.6 mA	Published basic-parameter operating point.
Transconductance	2000 μ S	Published basic-parameter value; normalized to μ S.
Plate resistance	2500000 Ω	Published internal/plate resistance.
Amplification factor	38	Published amplification factor.
Input capacitance	4 pF	Published in the filename-designated tube entry.
Output capacitance	5.5 pF	Published in the filename-designated tube entry.
Grid-to-plate capacitance	0.05 pF	Published in the filename-designated tube entry.

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	300 V	Published limiting operating value.
Maximum screen voltage	200 V	Published limiting operating value.
Maximum cathode current	6 mA	Published limiting cathode-current value.
Maximum plate dissipation	1 W	Published limiting plate-dissipation value.
Maximum screen dissipation	0.2 W	Published limiting screen-dissipation value.



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

SOURCE PDF

2026 JJ Electronic

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

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Uf	6.3 V	Published value

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
I _f	200 mA	Published value

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
U _a	250 V	Published value
U _{g3}	0 V	Published value
U _{g2}	140 V	Published value
I _a	3 mA	Published value
I _{g2}	0.6 mA	Published value
R _i	2.5 MΩ	Published value
μ _{g2/g1}	38	Published value

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
U _{a0}	550 V	Published value
U _a	300 V	Published value
W _a	1 W	Published value
U _{g20}	550 V	Published value
U _{g2}	200 V	Published value
W _{g2}	0.2 W	Published value
R _{g1}	10 MΩ	Published value