



ELECTRONIC TUBE REFERENCE

HA1

Voltage - Triode (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

OSRAM triode for general electronic service; available source material does not establish a narrower functional application confidently.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	4 V / 300 mA	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	11800 Ω
TRANSCONDUCTANCE	0.0017 S
AMPLIFICATION FACTOR	20
MAXIMUM PLATE VOLTAGE	180 V
MAXIMUM CATHODE CURRENT	4.5 mA
Published characteristics promoted where reliably identified; additional source values retained below.	

HA1: OSRAM triode valve. The complete approved OSRAM sheet was read for construction, characteristics, operating data, and application guidance.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1937 Osram Valves

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

1937 OSRAM VALVES

Section 1 · Triode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/filament voltage	4 V	—
Heater/filament current	300 mA	—
Plate impedance	11800 ohm	—
Mutual conductance	1700 uS	—
Amplification factor	20	—
Application	Ultra-short-wave reception/transmission and UHF amplification	

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum anode voltage	180 V	—
Anode current	4.5 mA	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

193X Osram

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

193X OSRAM

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Amplification factor	20	—
Plate impedance	11800 ohm	—
Mutual conductance	1700 uS	—



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

SOURCE PDF

1955 Marconi

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

1955 MARCONI
Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament Voltage	4 V	—
Filament Current	250 mA	—
Maximum Anode Current	4.5 mA	—
Detector Anode Voltage	100-150 V	—
Oscillator Frequency	600 MHz	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum/Published Anode Voltage	300 V	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-Anode Capacitance	1.4 pF	—
Grid-Cathode Capacitance	1 pF	—
Anode-Cathode Capacitance	0.6 pF	—