



ELECTRONIC TUBE REFERENCE

E83CC

Voltage - Dual Triode (similar) electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

TRIODE-TRIODE

Special-quality rugged high-mu twin triode for audio-frequency voltage amplification, designed for extended service life and dependable operation in professional equipment.

GENERAL CHARACTERISTICS

BASE DESIGNATION	Novol	BASE PINS	9
NOMINAL HEATER	6.3 V / 300 mA	PARALLEL HEATER	6.3 V / 300 mA
HEATING	Indirect	SERIES OPERATION	Capable
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	62500 Ω
TRANSCONDUCTANCE	0.0016 S
AMPLIFICATION FACTOR	100
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	1.2 W
MAXIMUM CATHODE CURRENT	9 mA

Representative row for electrically identical repeated section.

SECTION2 Triode	
PLATE RESISTANCE	62500 Ω
TRANSCONDUCTANCE	0.0016 S
AMPLIFICATION FACTOR	100
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	1.2 W
MAXIMUM CATHODE CURRENT	9 mA
<i>Second physical triode section; added to align rows with SectionCount.</i>	

Ruggedized double triode for audio-frequency amplification.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1955 Lorenz

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

1955 LORENZ

Section 1 · Triode

CONSTRUCTION

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Long-life construction	TRUE	—
Ruggedized construction	TRUE	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Siemens

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

1963 SIEMENS

Section 1 · Triode

CHARACTERISTIC

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical Plate Voltage	250 V	—
Typical Plate Current	1.25 mA	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1999 Philips E-Z

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

1999 PHILIPS E-Z

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Life test	10000 h	Published datasheet value
Heater voltage V_i	2.6 V	Published datasheet value
Heater current I_e	150 mA	Published datasheet value
Anode current I_y	1.25 mA	Published datasheet value
Mutual conductance S	1.6 mA/V	Published datasheet value
Heater voltage pin	6.3 V	Published datasheet value
Heater current I	315 mA	Published datasheet value
Heater voltage pin	12.6 V	Published datasheet value
Heater current I	150 mA	Published datasheet value
Cathode resistor R_y	1.6 k Ω	Published datasheet value
Anode current $I_a =$	20 pA	Published datasheet value
Anode voltage V_a	100 V	Published datasheet value
Anode current I_a	0.5 mA	Published datasheet value
Mutual conductance S	1.25 mA/V	Published datasheet value
and heater $V_i =$	100 V	Published datasheet value
Voltage between electrodes =	100 V	Published datasheet value
Voltage between electrodes =	300 V	Published datasheet value
Anode supply voltage $V_i =$	250 V	Published datasheet value
Grid voltage $-V_g =$	2 V	Published datasheet value
Grid to cathode and heater $C_{g/kf}$	1.6 pF	Published datasheet value
Anode to cathode and heater $C_{ay/kf}$	0.46 pF	Published datasheet value
$C_{a' /Kt}$	0.34 pF	Published datasheet value
Anode to grid C_{ag}	1.7 pF	Published datasheet value
Anode voltage $V_{ag \max}$	600 V	Published datasheet value
$V_a \max$	330 V	Published datasheet value
Anode dissipation $W_y \max$	1.2 W	Published datasheet value
Grid voltage $--V_g \max$	55 V	Published datasheet value
$+V_g \max$	0.5 V	Published datasheet value
Cathode current $I_y \max$	9 mA	Published datasheet value

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
in case of phase inverter circuit max	135 kQ	Published datasheet value
Input voltage required for	50 mW	Published datasheet value
Heater voltage: The average heater voltage should be	6.3 V	Published datasheet value
Variations of the heater voltage exceeding the range of	6 V	Published datasheet value
Anode supply voltage Vba	400 V	Published datasheet value
Anode current I,	2.45 mA	Published datasheet value
(Grid current =	0.3 μA	Published datasheet value
Anode current	1.72 mA	Published datasheet value
Anode current I	1.02 mA	Published datasheet value
Anode resistor R,	47 kQ	Published datasheet value
Anode current I	3.1 mA	Published datasheet value
Anode current I,	1.95 mA	Published datasheet value
Anode voltage Vba	400 V	Published datasheet value
Anode current I,	1.09 mA	Published datasheet value
Output voltage Vo	38 V	Published datasheet value
Anode current I	3.8 mA	Published datasheet value
Anode supply voltage Vha	400 V	Published datasheet value
Anode current I,	2.29 mA	Published datasheet value
Anode supply voltage Vhba	400 V	Published datasheet value
Anode current I,	1.23 mA	Published datasheet value
Anode current I+,	1.2 mA	Published datasheet value
(Grid current =	0.3 pA	Published datasheet value
Cathode resistor Ry	820 Q	Published datasheet value
Anode current Ity	1.7 mA	Published datasheet value
W =	12 W	Published datasheet value

TUBE TINKER

An independent reference for electronic tubes, vacuum tubes, and their source documents.

