



ELECTRONIC TUBE REFERENCE

ECC2000

Voltage - Dual Triode (similar) electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

TRIODE-TRIODE

Special-purpose industrial twin triode intended for demanding professional electronic service, with paired triode sections and characteristics selected for reliable operation.

GENERAL CHARACTERISTICS

BASE DESIGNATION	10-pin miniature	BASE PINS	10
NOMINAL HEATER	6.3 V / 325 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
TRANSCONDUCTANCE	0.0175 S
AMPLIFICATION FACTOR	28
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	2.7 W
MAXIMUM CATHODE CURRENT	40 mA
<i>Premium-quality long-life dual triode for VHF cascode service; identical sections compressed.</i>	

SECTION2 Triode	
TRANSCONDUCTANCE	0.0175 S
AMPLIFICATION FACTOR	28
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	2.7 W
MAXIMUM CATHODE CURRENT	40 mA
Second physical triode section; added to align rows with SectionCount.	

The Amperex ECC2000 is a premium-quality, long-life, shock- and vibration-resistant dual triode for VHF cascode amplification up to 300 MHz and frequency-multiplier service.



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 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/Filament Voltage	6.3 V	Published datasheet value
Heater/Filament Current	325 mA	Published datasheet value
Maximum Plate/Anode Voltage	250 V	Published datasheet value
Maximum Plate/Anode Dissipation	2.7 W	Published datasheet value

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	17500 μ S	Published datasheet value
Amplification Factor	28	Published datasheet value



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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage V_{ϕ}	6.3 V	Heater voltage V_{ϕ} 6.3 V
Heater current I_{ϕ}	335 mA	Heater current I_{ϕ} 335 mA
Anode voltage	90 V	Anode voltage 90 90 90 90 v

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode current	27 mA	Anode current 15 27 15 27 mA
Heater voltage	6.3 V	Heater voltage 6.3
Heater current	335 mA	Heater current 335 mA
Anode voltage	90 V	Anode voltage 90 90
Grid voltage	1.4 V	Grid voltage 2.1 1.4
Anode current	27 mA	Anode current 15 27 mA
Anode voltage	90 V	Anode voltage 90 90
Grid voltage	1.4 V	Grid voltage 2.0 1.4
Anode current	27 mA	Anode current 15 27 mA
heater V	150 V	heater V = 150 V
Cathode positive Initial	15 V	Cathode positive Initial 15 uA
heater V	50 V	heater V = 50V
Cathode negative Initial	15 V	Cathode negative Initial 15 UA
neutralisation screen Cg'/k'fsn'	5.1 pF	neutralisation screen Cg'/k'fsn' 5.1 pF
neutralisation screen Ca'/k'fsn'	5 pF	neutralisation screen Ca'/k'fsn' 5.0 pF
Grid to neutralisation screen Cg'sn'	1.4 pF	Grid to neutralisation screen Cg'sn' 1.4 pF
Anode to grid Ca'g'	0.45 pF	Anode to grid Ca'g' 0.45 pF
Anode to neutralisation screen Catsn'	3.4 pF	Anode to neutralisation screen Catsn' 3.4 pF
Cathode to grid and filament Ck/gf	6.5 pF	Cathode to grid and filament Ck/gf 6.5 pF
Anode to grid and filament Ca/gf	3.2 pF	Anode to grid and filament Ca/gf 3.2 pF
Anode to cathode Cak	180 pF	Anode to cathode Cak 180 mpF
Anode to grid Cag	1.5 pF	Anode to grid Cag 1.5 pF
Heater voltage Vg	6.3 V	Heater voltage Vg 6.3 V
Anode supply voltage Vba	110 V	Anode supply voltage Vba 110 VvV
Grid supply voltage Vbg	17 V	Grid supply voltage Vbg 17V
Cathode resistor Rg	680 A	Cathode resistor Rg 680 Q@
Anode voltage Vag max.	450 V	Anode voltage Vag max. 450 V
Anode dissipation W, max.	2.7 mA	Anode dissipation W, max. 2.7 W

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid voltage $-V_g$ max.	50 V	Grid voltage $-V_g$ max. 50 V
Grid peak voltage $-V_{gp}$ max.	150 V	Grid peak voltage $-V_{gp}$ max. 150 V
Duty factor max.	1 mA	Duty factor max. 1%
Cathode current I max.	40 mA	Cathode current I max. 40 mA
Cathode peak current I_x max.	400 mA	Cathode peak current I_x max. 400 mA
Duty factor max.	109 mA	Duty factor max. 109
Grid resistor R max.	1 mA	Grid resistor R max. 1 M Ω
Cathode positive V_{it} (k+) max.	150 V	Cathode positive V_{it} (k+) max. 150 V
Cathode negative V_{it} (k-) max.	50 V	Cathode negative V_{it} (k-) max. 50 V
Supply voltage V_p	200 V	Supply voltage V_p 200 200 Vv
Cathode resistor $R_{y!}$	680 A	Cathode resistor $R_{y!}$ 1200 680
Anode current I,	26.5 mA	Anode current I, 15.5 26.5 mA E

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Mutual conductance	22 mA/V	Mutual conductance 13 17.5 17 22 mA/V
Mutual conductance	17.5 mA/V	Mutual conductance 13 17.5 mA/V
Amplification factor	27 A	Amplification factor 27 27
Equivalent noise resistance	200 V	Equivalent noise resistance 250 200
Mutual conductance S	22 mA/V	Mutual conductance S 17 22 mA/V
Amplification factor	28 A	Amplification factor 7 28 28
Equivalent noise resistance R_{eq}	150 V	Equivalent noise resistance R_{eq} 200 150
Insulation resistance between Rins Initial	100 A	Insulation resistance between Rins Initial 100
Input resistance r_g	670 A	Input resistance r_g 910 670 Q E
Input capacitance C_i	12 pF	Input capacitance C_i 11 12 pF
Noise figure F	2.5	Noise figure F 2.5 2.5 kT,