

ELECTRONIC TUBE REFERENCE

E80CC

Voltage - Dual Triode (similar) electronic tube

CONSOLIDATED TECHNICAL DATA
2 SECTIONS
CONSTRUCTION
TRIODE-TRIODE

Special-quality double triode with separate cathodes for industrial equipment requiring stable electrical characteristics and long operating life.

GENERAL CHARACTERISTICS

BASE DESIGNATION	NOVAL	BASE PINS	9
NOMINAL HEATER	6.3 V / 600 mA	PARALLEL HEATER	6.3 V / 600 mA
HEATING	Indirect	SERIES OPERATION	Capable
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	10000 Ω
TRANSCONDUCTANCE	0.0027 S
AMPLIFICATION FACTOR	27
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	2 W
MAXIMUM GRID DISSIPATION	0.1 W
MAXIMUM CATHODE CURRENT	12 mA
Representative row for electrically identical repeated section.	

SECTION2 Triode	
PLATE RESISTANCE	10000 Ω
TRANSCONDUCTANCE	0.0027 S
AMPLIFICATION FACTOR	27
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	2 W
MAXIMUM GRID DISSIPATION	0.1 W
MAXIMUM CATHODE CURRENT	12 mA
Second physical triode section; added to align rows with SectionCount.	

Special-quality double triode with separate cathodes for industrial equipment requiring stable characteristics and long life.



SOURCE OPERATING CONDITIONS

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1958 Amperex Industrial

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

1958 AMPEREX INDUSTRIAL

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	300 V	Published table
Plate current	112 mA	Published table

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	2700 ohm	Published table
Amplification factor	27	Published table
Heater/filament voltage	6.3 V	Published rating
Heater/filament current	600 mA	Published rating
Series heater voltage	12.6 V	SeriesHeater
Series heater current	300 mA	SeriesHeater



SOURCE OPERATING CONDITIONS

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1963 Amperex Condensed

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1963 AMPEREX CONDENSED

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	Published rating
Heater current	600 mA	Published rating

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Series heater voltage	12.6 V	SeriesHeater
Series heater current	300 mA	SeriesHeater
Published characteristic value	2.6	PremiumQuality
Published characteristic value 2	3.5	PremiumQuality

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	300 V	PremiumQuality
Maximum plate current	12 mA	PremiumQuality


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1963 Philips Electron Tubes Handbook V1a

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1963 PHILIPS ELECTRON TUBES HANDBOOK V1A

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	250 V	EachUnit
Plate current	6 mA	EachUnit

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	2700 μ S	EachUnit
Plate resistance	10 k Ω m	EachUnit


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1963 Philips Electron Tubes Handbook V3

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1963 PHILIPS ELECTRON TUBES HANDBOOK V3

Section 1 · Triode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Capacitances. capacit	6 s	Capacitances. capacit6s. \$apazitaten
Grid capacitance	3 pF	$C_g = 3.0 \pm 0.6 \text{ pF}$ 0a8 = 3.1 pP
Grid capacitance	2.6 pF	$C_g = 2.6 \pm 0.7 \text{ pF}$ $C_g = 2.4 \text{ pF}$
Plate capacitance	3.5 pF	$C_a = 3.5 \pm 0.1 \text{ pF}$ $C_a = 0.45 \text{ pF}$
Cathode-heater capacitance	4.8 pF	$C_{kf} 4.8 \text{ pF}$ 1).5. 4 $C_{kf} 4.8 \text{ pF}$
Heater voltage	6.3 V	1) The maximum deviation of If at $V_f = 6.3 \text{ V}$ or at
Heater voltage	12.6 V	$V_f = 12.6 \text{ V}$ is $\pm 5\%$.

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Published electrical value	6.3 V	1) The maximum deviation of If at $V_f = 6.3 \text{ V}$ or at
Heater voltage	6.3 V	La deviation de If A $V_f = 6.3 \text{ V}$ ou $V_f = 12.6 \text{ V}$
Heater voltage	6.3 V	Die Hochstabweichung von If bei $V_f = 6.3 \text{ V}$ oder
Heater voltage	12.6 V	bei $V_f = 12.6 \text{ V}$ ist $\pm 5\%$.
Transconductance	4.3 mA	$I_a S 4.3 \text{ mA}$
Transconductance	5 mA/V	$S 5 1.8 \text{ mA/V}$
Control-grid current	1 mA	$-I_{g1} 1.0 \text{ uA}$
Plate voltage	250 V	$V_a = 250 \text{ V}$
Cathode resistor	920 ohm	$R_k = 920 \text{ } \Omega$
Plate current	6 mA	$I_a = 6.0 + 0.6 \text{ mA}^3$)
Transconductance	2.7 mA/V	$S = 2.7 + 0.5 \text{ mA/V}^3$)
Amplification factor	27	$\mu = 27$
Plate resistance	10 kohm	$R_i = 10 \text{ k}\Omega$

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate current	-11 mA	$I_a = -11 = \text{max. } 15 \mu\text{A}$
Cathode-heater voltage	120 V	Isolation k—f (Vkf= 120 V) Rkf = min.10 M4
Load resistance	220 kohm	$R_a = 220 \text{ k}\Omega$ $R_k = 3.9 \text{ k}\Omega$ $R_{g1'} = 0.68 \text{ M}\Omega$
Cathode resistor	3.9 kohm	$R_a = 220 \text{ k}\Omega$ $R_k = 3.9 \text{ k}\Omega$ $R_{g1'} = 0.68 \text{ M}\Omega$

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Temps de chauffage de la cathode	16 s	Temps de chauffage de la cathode = 16s
Temps de refroidissement de la cathode = min	13 s	Temps de refroidissement de la cathode = min. 13 s
Heater voltage	6.3 V	Heating : indirect by A.C. or D.C.; $V_f = 6.3 \text{ V } 1)$
Heater current	600 mA	Chauffage: indirect par C.A. ou $I_f = 0.6 \text{ A } 1)$
Heater voltage	1.2 V	oder Gleichstrom;Parallel- $V_f = 1.2.6 \text{ V } 1)$
Heater current	300 mA	oder Serienspeisung $I_f = 0.3 \text{ A } 1)$
Warm-up time	16 s	Hammer tiber einen Winkel von 30° ge— hoben wird. Cathode heating time Temps de chauffage de la cathode = 16s = max. 23 s Katodenanheizze


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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	6 mA	—


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1967 Mullard Receiving Tubes for Maintenance

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

1967 MULLARD RECEIVING TUBES FOR MAINTENANCE

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Ih 300	600 mA	Published in approved E80CC.pdf target datasheet; Section1
Ca ' - g ' 3.0±0.6	3 pF	Published in approved E80CC.pdf target datasheet; Section1
* Ci TI 2.6±0.7	2.4 pF	Published in approved E80CC.pdf target datasheet; Section1
CO U~ ' 3.0 ±0.7	0.55 pF	Published in approved E80CC.pdf target datasheet; Section1
* Cg - h < 0.23 <	0.23 pF	Published in approved E80CC.pdf target datasheet; Section1
Ca '"- g " 3.0 ±0.6	3.1 pF	Published in approved E80CC.pdf target datasheet; Section1
Cou t " 3.5±0.7 0.4	5 pF	Published in approved E80CC.pdf target datasheet; Section1
Ca ' --a" 1.3± 0.4	1.45 pF	Published in approved E80CC.pdf target datasheet; Section1
Cg ' _ g" < 0.013 <	0.013 pF	Published in approved E80CC.pdf target datasheet; Section1
Ca ' - g " < 0.065 <	0.065 pF	Published in approved E80CC.pdf target datasheet; Section1
*Ck- h 4.8	4.8 pF	Published in approved E80CC.pdf target datasheet; Section1
Ca lf _ g ' < 0.1 <	0.1 pF	Published in approved E80CC.pdf target datasheet; Section1
*1. 6.0:±,	0.6 mA	Published in approved E80CC.pdf target datasheet; Section1
*gm 2.7	0.5 mA	Published in approved E80CC.pdf target datasheet; Section1
I. ~	4.3 mA	Published in approved E80CC.pdf target datasheet; Section1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
$g_m \sim 1$	8 mA	Published in approved E80CC.pdf target datasheet; Section1
$I_{a1} \sim I_{a2} <$	3 mA	Published in approved E80CC.pdf target datasheet; Section1
$I_{tqpl} q_{max}$	150 mA	Published in approved E80CC.pdf target datasheet; Section1
$I_{ik,Pl} \max$	30 mA	Published in approved E80CC.pdf target datasheet; Section1
$I_{ig}(Pl)_{max}$	30 mA	Published in approved E80CC.pdf target datasheet; Section1
$I_{ig} \{pkl} <$	2 mA	Published in approved E80CC.pdf target datasheet; Section1



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

Section 1 · Triode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater current	-30 mA	Translated from Russian source; Ток накала , (600+-30) mA
Plate current	-0.6 mA	Translated from Russian source; Ток анода . . о. (6=-0,6) mA
Transconductance	5 mA/V	Translated from Russian source; Крутизна — характеристики ее , (2,7:0,5) MA/B
Amplification factor	27	Translated from Russian source; Коэффициент усиления , .. 27
Output capacitance	2 pF	Translated from Russian source; выходная 2-го триода ,
Transfer capacitance	1 pF	Translated from Russian source; проходная 1-го триода .

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transfer capacitance	2 pF	Translated from Russian source; проходная 2-го триода .
Heater current	300 mA	Translated from Russian source; Ток накала . , 300 mA
Plate current	10.5 mA	Translated from Russian source; Ток анода —. 10,5 mA
Transconductance	2.2 mA/V	Translated from Russian source; Крутизна характеристики , 2,2 mA/B
Output capacitance	1 pF	Translated from Russian source; выходная 1-го триода й
Output capacitance	2 pF	Translated from Russian source; выходная 2-го триода , *

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.6 V	Translated from Russian source; Напряжение накала , * 6—6,6 B
Plate voltage	300 V	Translated from Russian source; Напряжение анода * 300 B


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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	6.3 V	Published datasheet value
Heater voltage	12.6 V	Published datasheet value
Heater voltage	6 V	Published datasheet value
Heater current	600 mA	Published datasheet value
Heater current	-315 mA	Published datasheet value

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode current	4.4 mA	Published datasheet value
Anode current	2.3 mA	Published datasheet value
Anode current	1.15 mA	Published datasheet value
Anode voltage	250 V	Published datasheet value
Anode voltage	600 V	Published datasheet value
Mutual conductance	2.7 mA/V	Published datasheet value
Amplification factor	27	Published datasheet value