



ELECTRONIC TUBE REFERENCE

PCC189

Voltage - Dual Triode (similar high frequency) electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

TRIODE-TRIODE

Variable-mu low-noise dual triode with 300 mA series heater, designed for gain-controlled VHF cascode amplifiers in television tuners.

GENERAL CHARACTERISTICS

BASE DESIGNATION	9C12	BASE PINS	9
NOMINAL HEATER	7.6 V / 300 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	2500 Ω
TRANSCONDUCTANCE	0.0125 S
AMPLIFICATION FACTOR	31
MAXIMUM PLATE VOLTAGE	130 V
MAXIMUM PLATE DISSIPATION	1.8 W
MAXIMUM CATHODE CURRENT	22 mA

Triode section; promoted values are taken from the approved source where explicitly published.

SECTION2 Triode	
PLATE RESISTANCE	2500 Ω
TRANSCONDUCTANCE	0.0125 S
AMPLIFICATION FACTOR	31
MAXIMUM PLATE VOLTAGE	130 V
MAXIMUM PLATE DISSIPATION	1.8 W
MAXIMUM CATHODE CURRENT	22 mA
<i>Second physical triode section; identical twin section represented explicitly.</i>	

300 mA series-heater variable-mu low-noise dual triode for VHF cascode amplifiers; the source refers to ECC189 for remaining characteristics.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1953 La Radiotechnique

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

1953 LA RADIOTECHNIQUE

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Indirect (cathodes isolees du filament)	3 A	Triode
Alimentation en parallele ! Vt	72 V	Triode
Capacite entre les anodes Caa	0.015 pF	Triode
Capacite grille G-anode A' Cga'	0.004 pF	Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Tension de la grille	-12 V	Triode
Plate current	15 mA	Triode
Plate resistance	2.72 kohm	Triode
Transconductance nominale	125 mA/V	Triode
Resistance equivalente de souffle	850 ohm	Triode
a 5 % de Snominale. Vg (5%)	-5 V	Triode
Tension dela grillea 1 % de Snominale. Vg (1%)	-9 V	Triode
Plate voltage	130 V	Triode
Tension de la grille	50 V	Triode
filament	20 kohm	Triode
triode T	80 V	Triode
130 V	130 V	Triode
20 cnc e Vk'f	150 V	Triode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Capacite de la grille. Cg (kK+f+b)	3.4 pF	Triode
Plate capacitance Ca (Kfb)	2.4 pF	Triode
grille	1.9 pF	Triode
ment	22 pF	Triode
cathode	0.17 pF	Triode
Capacite de la ca- Ck ; (g'f+b)	6.3 pF	Triode
Plate capacitance Ca' (g'f+b)	3.9 pF	Triode
filament	3 pF	Triode



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1961 Ferranti Technical Handbook

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

1961 FERRANTI TECHNICAL HANDBOOK

Section 1 · Triode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	7.6 V	—
Heater Current	300 mA	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Anode Supply Voltage	550 V	—
Maximum Anode Voltage	130 V	—



SOURCE DATA APPENDIX

1968 Mazda Belvu

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

1968 MAZDA BELVU

Section 1 · Triode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater or filament voltage	7.6 V	Published nominal or stated operating value
Heater or filament current	300 mA	Published nominal or stated operating value
Transconductance	12500 μ S	Published/reference characteristic

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate dissipation	1.8 W	Published/reference maximum rating



SOURCE DATA APPENDIX

1972 Philips Receiving Tubes

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

1972 PHILIPS RECEIVING TUBES

Section 1 · Triode

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	VHFCascodeAmplifier text	—



SOURCE DATA APPENDIX

1973 Mazda Valves Binder 2

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

1973 MAZDA VALVES BINDER 2

Section 1 · Triode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	7.6 V	Published nominal value
Heater current	300 mA	Published nominal value
Transconductance	12500 μ S	Published operating characteristic

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate dissipation	1.8 W	Published maximum rating



SOURCE DATA APPENDIX

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

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical plate voltage	90 V	—
Typical grid voltage	-1.4 V	—
Typical plate current	15 mA	—
Transconductance	12500 μ S	—
Amplification factor	31	—
Plate resistance	2500 ohm	—
Controlled transconductance	625 μ S	GridVoltage=-5V
Controlled transconductance	125 μ S	GridVoltage=-9V

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-cathode-heater-screen capacitance	3.5 pF	—
Anode-cathode-heater-screen capacitance	2.3 pF	—
Anode-grid capacitance	1.9 pF	—
Grid-heater capacitance	0.28 pF	—
Anode-anode capacitance	0.015 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum cathode-heater voltage input unit	80 V	Section1
Maximum cathode-heater voltage output unit	180 V	Section2;CathodePositive