



ELECTRONIC TUBE REFERENCE

EC88

Voltage - Triode (single high frequency) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
TRIODE

High-frequency triode for UHF amplifier service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	9C12	BASE PINS	9
NOMINAL HEATER	6.3 V / 165 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Triode	
PLATE RESISTANCE	4300 Ω
TRANSCONDUCTANCE	0.0135 S
AMPLIFICATION FACTOR	65
MAXIMUM PLATE VOLTAGE	175 V
MAXIMUM PLATE DISSIPATION	2 W
MAXIMUM CATHODE CURRENT	13 mA
<i>Triode section; values semantically promoted from published characteristics/maximum-ratings tables where present.</i>	

Low-noise UHF triode intended for grounded-grid amplification in television Bands IV and V.

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
Alimentation du filament en parallele. ! f	165 mA	Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Tension de l'anode	160 V	Triode
Tension de la grille	-1.25 V	Triode
Courant anodique	125 mA	Triode
Pente	135 mA/V	Triode
R equivalente	240 ohm	Triode
Sortie fag – 1700 MHz	1700 MHz	Triode
Entree fgk	1000 MHz	Triode
Chiffre de bruit (850 MHz)	850 MHz	Triode
Cag	3.7 pF	Triode
Ca (K+ f)	55 mpF	Triode
Tension de l'anode	175 V	Triode
l'anode	2 W	Triode
Courant cathodique	13 mA	Triode
Tension de la grille	50 V	Triode
grille	1 Mohm	Triode
cathode	100 V	Triode
(1) 0.5 MQ, avec polarisation automatique	0.5 Mohm	Triode

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Amperex Condensed

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

1963 AMPEREX CONDENSED

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	Published heater rating
Heater current	180 mA	Published heater rating
Amplification factor	65	GroundedGridRF
Plate resistance	4300 ohm	GroundedGridRF
Transconductance	13500 μ S	GroundedGridRF

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	160 V	GroundedGridRF
Control-grid bias	-1.25 V	GroundedGridRF
Plate current	12.5 mA	GroundedGridRF

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Philips Electron Tubes Handbook V1a

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

1963 PHILIPS ELECTRON TUBES HANDBOOK V1A

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	160 V	—
Grid voltage	-1.3 V	—
Plate current	12.5 mA	—
Maximum plate voltage	175 V	—
Maximum plate dissipation	2 W	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	13500 μ S	—
Amplification factor	65	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-plate capacitance	1.4 pF	—
Input capacitance	3.3 pF	—
Output capacitance	2.5 pF	—



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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
and mixer at frequencies up to	1000 MHz	Published in approved EC88.pdf target datasheet; Section1
f 600	1000 MHz	Published in approved EC88.pdf target datasheet; Section1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
la 12.5	12.5 mA	Published in approved EC88.pdf target datasheet; Section1
gm 13.5	13.5 mA	Published in approved EC88.pdf target datasheet; Section1
Power gain 18	17.5 dB	Published in approved EC88.pdf target datasheet; Section1
Noise factor (power matched) 9.0	12.5 dB	Published in approved EC88.pdf target datasheet; Section1
la	9 mA	Published in approved EC88.pdf target datasheet; Section1
gc	54 mA	Published in approved EC88.pdf target datasheet; Section1
Ik max	13 mA	Published in approved EC88.pdf target datasheet; Section1

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
ca-g+S	1.7 pF	Published in approved EC88.pdf target datasheet; Section1
Cg-k	3.3 pF	Published in approved EC88.pdf target datasheet; Section1
Ca-k	0.045 pF	Published in approved EC88.pdf target datasheet; Section1
Ch-k - ' -g+S	3.8 pF	Published in approved EC88.pdf target datasheet; Section1
Ca-k+h	0.055 pF	Published in approved EC88.pdf target datasheet; Section1

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
la	12.5 mA	Published in approved EC88.pdf target datasheet; Section1
gm	13.5 mA	Published in approved EC88.pdf target datasheet; Section1



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 voltage	6.3 V	Published nominal value
Heater current	165 mA	Published nominal value
Transconductance	13500 μS	Published nominal or operating characteristic
Anode resonance frequency	1700 MHz	Input short-circuited
Noise resistance	240 ohm	Published equivalent noise resistance

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate dissipation	2 W	Published 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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage V _h	6.3 V	—
Heater current I	165 mA	—

TUBE TINKER

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

