

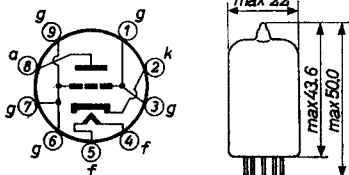
TRIODE for use as grounded grid U.H.F. amplifier in tuners for television bands IV and V

HEATING

Indirect by A.C. or D.C.; parallel supply

Heater voltage $V_f = 6.3 \text{ V}$
 Heater current $I_f = 165 \text{ mA}$

Dimensions in mm



Base: NOVAL

CAPACITANCES

Without external screening

Anode to grid $C_{ag} = 1.2 \text{ pF}$

With external screening (inside diameter 22.2 mm)

Anode to grid $C_{ag} = 1.7 \text{ pF}$

Grid to heater and cathode $C_{g(k+f)} = 3.8 \text{ pF}$

Anode to heater and cathode $C_{a(k+f)} = 0.055 \text{ pF}$

LIMITING VALUES (Design centre limits)

Anode voltage in cold condition	V_{ao}	= max. 550 V
Anode voltage	V_a	= max. 175 V
Anode dissipation	W_a	= max. 2 W
Cathode current	I_k	= max. 13 mA
Negative grid voltage	$-V_g$	= max. 50 V
External grid resistance (at cathode resistor $R_k = 100 \Omega$)	$R_g (R_k = 100 \Omega)$	= max. 1 M Ω
Voltage between heater and cathode	V_{kf}	= max. 100 V

CHARACTERISTICS

Heater voltage	$V_f =$	6.3 V ¹⁾
Anode voltage	$V_a =$	160 V ¹⁾
Cathode resistor	$R_k =$	100 Ω ¹⁾
Anode current	$I_a =$	12.5 mA
Mutual conductance	$S =$	13.5 mA/V
Amplification factor	$\mu =$	65
Equivalent noise resistance	$R_{eq} =$	240 Ω
Noise figure	$F =$	10 dB

Heater voltage	$V_f =$	6.3 V
Anode voltage	$V_a =$	0 V
Positive grid current	$+I_g =$	0.3 μ A
Negative grid voltage	$-V_g =$ max.	1.3 V

Series resonance frequencies

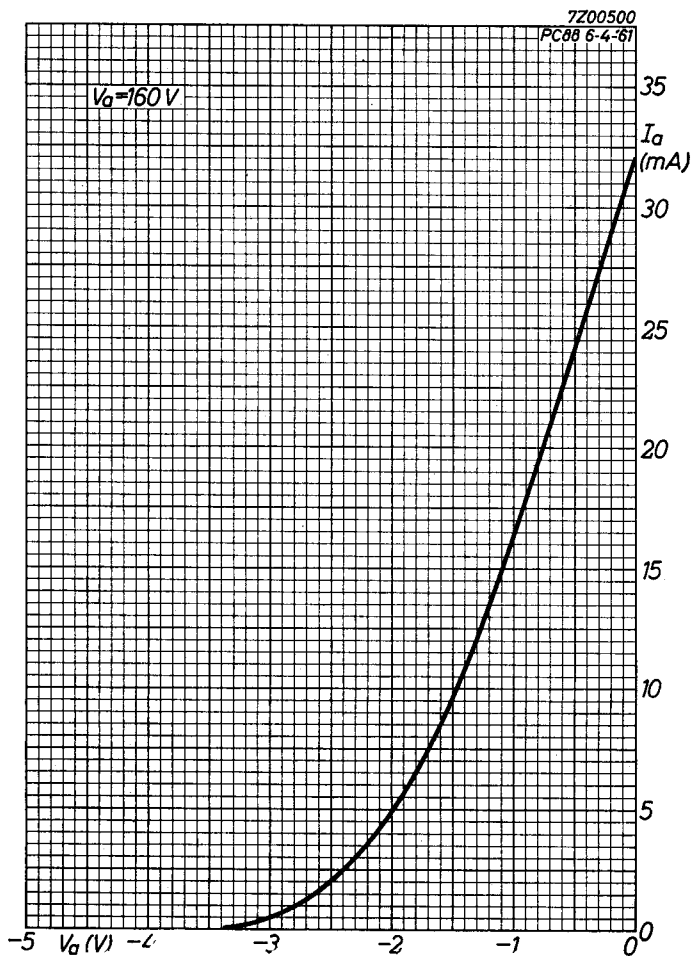
Measured between a point on the relevant tube pin close to the tube bottom and a point close to the relevant pin on a metal reference plane, placed against the tube bottom. All the pins, except the relevant one, are connected to the reference plane with a negligible impedance. The tube is screened by a metal cylinder with an inside diameter of 22.2 mm placed upon the metal reference plane.

Heater voltage	$V_f =$	0 V
Anode voltage	$V_a =$	0 V
Anode resonance frequency	$f_{Oa} =$	1700 Mc/s
Cathode resonance frequency	$f_{Ok} =$	1000 Mc/s

¹⁾ Recommended operating conditions

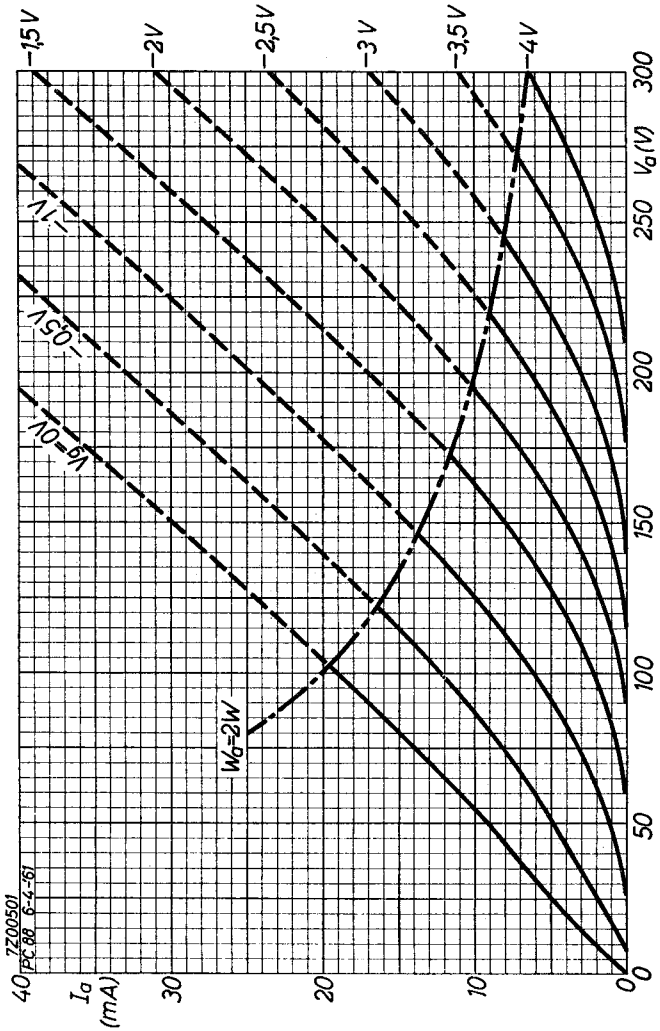
PHILIPS

EC88



4.4.1961

A

EC88**PHILIPS**

B

PHILIPS



*Electronic
Tube*

HANDBOOK

page	EC88 sheet	date
1	1	1962.07.07
2	2	1962.07.07
3	A	1961.04.04
4	B	1961.04.04
5	FP	2005.05.06